

Johnson, R. E.,

1966 - 1967

catalogue

#1 - 118 (1966)

Montana

R.E. Johnson

1966-1967
(part)

① MVZ Collecting Trip to Montana
June 13 - July 12, 1966

- a. Catalog
- b. Journal

② Winter - Spring 1967 - Localities:

Berkeley Hills March 3, 4, April 21, 28, 29, May 12
Jan. 11, 12, 13, 14, 20, 21, 27, 28, Feb. 10, 11, 23, 24, 25

Berkeley Aquatic Park Jan 28, Feb. 3, 4, March 5

Berkeley Marina Jan 5, March 5

Horicon National Wildlife Refuge, Wisconsin Feb. 20

Stinson Beach, Marin Co., Calif. March 19

Santa Barbara April 8, 9

Point Isabel, Contra Costa Co., Calif. May 4, 5, 6

Icehouse Canyon, Los Angeles Co., Calif. May 15

- a. Journal
- b. Species Accounts

Digitized by the Internet Archive
in 2017 with funding from
CLIR

<https://archive.org/details/fieldnotesv137700john>

Catalogue

2

Spar Lake, 3300 ft., Lincoln Co., Montana

June 16, 1966

- | | | | | |
|----|------|--------------------------|---------------|---------|
| 1. | ♀ | Eutamias | 230-103-32-18 | 73.5 gm |
| 2. | ♂ | Eutamias | 210-95-32-16 | 57.1 |
| 3. | ♀ | Calliope Hummingbird (?) | alcoholic | 2.9 |
| 4. | ♀(?) | Rufous Hummingbird | alcoholic | 3.8 |

Spar Creek Drainage, 4700 ft., Lincoln Co., Montana (Burned area)

June 17, 1966

- | | | | | |
|----|---|--------------------|---------|-------|
| 5. | ♂ | Clark's Nutcracker | 2x3 mm | 147.5 |
| 6. | ♂ | Western Tanager | 11x7 mm | 30.5 |

Spar Creek Drainage, 4700 ft., Lincoln Co., Montana

June 18, 1966

- | | | | | |
|----|------|-----------------------|-----------|------|
| 7. | ♂ | Red-breasted Nuthatch | 7x5 mm | 10.9 |
| 8. | ♂ | Winter Wren | 7x5 mm | 10.3 |
| 9. | ♀(?) | Rufous Hummingbird | alcoholic | 3.6 |

Spar Creek Drainage, 4700 ft., Lincoln Co., Montana

June 19, 1966.

- | | | | | |
|-------------|-----|-------------------------|--------------|----------------|
| 10. | ♀ | Lazuli Bunting | 2 mm ovum | 16.0 |
| ated pair { | 11. | ♀ | Oregon Junco | alcoholic 22.8 |
| | 12. | ♂ | Oregon Junco | alcoholic 18.1 |
| | 13. | ♂ | Oregon Junco | alcoholic 18.4 |
| 14. | ♂ | Hairy Woodpecker | 5x2 mm | 83.6 |
| 15. | ♀ | Hairy Woodpecker | alcoholic | 67.4 |
| 16. | ♀ | Mac Gillivray's Warbler | alcoholic | 12.3 |

~~June 20, 1966~~Logged area, $\frac{1}{4}$ mi. E & $\frac{1}{2}$ mi. N of Spar Lake, 3100 ft.

June 20, 1966

- | | | | | |
|-----|---|-----------------|---------|------|
| 17. | ♂ | Western Tanager | 7x12 mm | 30.9 |
|-----|---|-----------------|---------|------|

Catalogue

18. ♂ Yellow-bellied Sapsucker 6x7mm 54.1gm
 19. ♀ Pine Siskin ovary 6x4mm; largest ovum 1.5mm; brood patch 12.5

Keeler Peak Road, 4700 Ft, Lincoln Co., Montana

June 20, 1966

20. Red-breasted Nuthatch alcoholic 10.9

Jct. Keeler Creek Rd and Spar Lake Rd, Lincoln Co., Montana

June 20, 1966

21. Warbling Vireo alcoholic 14.0

Spar Creek Drainage, 4700 Ft, Lincoln Co., Montana

June 21, 1966

22. ♂ Yellow-bellied Sapsucker 6x3mm brood patch 51.1
 23. ♂ Lazuli Bunting 9x6mm 13.4

Spar Lake, 3300 Ft, Lincoln Co., Montana

June 20, 1966

24. ♀ Robin 2mm ovum; 14x7mm ovary brood patch 89.5

Keeler Mtn, 4800 Ft, Lincoln Co., Montana

June 22, 1966

25. ♂ Townsend Warbler 5x7mm 9.3gm
 26. ♂ Pine Siskin 5x7mm 13.1gm
 26. ♂ Pine Siskin 5x6mm 12.4gm

Catalogue

67. ♀ Red Squirrel 6 embryos, 7mm. no wt.
 27. Imm. Golden-crowned Kinglet alcoholic 7.7 gm.

June 23, 1966

28. ♀ Hermit Thrush ovary 8x4mm ovum 1½mm brood patch 32.7
 29. ♂ Swainson Thrush 12x6mm 27.3
 30. ♂ Oregon Junco 8x10mm 20.3
 31. Chipping Sparrow alcoholic 14.7

Spar Lake, 3300 ft., Lincoln Co., Montana.

June 24, 1966

32. ♂ Red-tailed Hawk 6x3mm 876.2

Keeler Mtn, 4800 ft., Lincoln Co., Montana

June 24, 1966

33. Townsend Warbler 9.7
 34. Imm Oregon Junco 18.0
 35. Chipping Sparrow 13.1

West Fork Yaak River, 5000 ft., Lincoln Co., Montana

June 26, 1966

36. ♂ Imm. Canada Jay skull not os. 2x1mm 68.4
 37. ♂? Imm. Canada Jay skull not. os. 68.6
 38. Wilson Warbler alcoholic 8.6
 39. Wilson Warbler alcoholic 7.7
 40. ♂ White-crowned Sparrow 11x7mm no wt.
 41. Toad 9.4 gm
 42. Frog 4.5 gm
 43. Chipmunk 206-97-34-17 51.2

R.E. Johnson

Catalogue

West Fork Yaak River, 5500 ft., Lincoln Co., Montana

June 26, 1966

44. Toad 75.8 gm.

Pk. West of Davis Mtn., 6600 ft., Lincoln Co., Montana

June 27, 1966

45. ♂ Rock Wren 7 x 3 mm 16.0

Pk. West of Davis Mtn., 6400 ft., Lincoln Co., Montana June 27, 1966

46. ♂ Hairy Woodpecker 3 x 4 mm no. wt.

47. ♀ Hairy Woodpecker ovary 7 x 5 mm ovum 1 mm 67.6 gm.

West Fork Yaak River, 5000 ft., Lincoln Co., Montana

June 27, 1966

48. Frog 13.9 gm

49. Frog 7.0 gm

50. Frog —

~~Or.~~

Pk. West of Davis Mtn., 7000 ft., Lincoln Co., Montana

June 27, 1966

51. Oregon Junco 17.4 gm

Rock Candy Mtn., 7000 ft., Lincoln Co., Montana

June 28, 1966

52. ♂ Mtn. Bluebird 11 x 9 mm 27.8

53. ♂ Mtn. Bluebird 12 x 8 mm 30.8

54. ♀ Mtn. Bluebird ovary 8 x 4 mm ovum 1 mm 31.3

55. ♀ Townsend Solitaire 9 x 6 mm 3 mm 38.0.

Catalogue

R.E. Johnson

West Fork Yaak River, 6200 ft., Lincoln Co., Montana

June 28, 1966

56. ♂ Cong ^{et. vis.} 11 mm 212-12-33-22 175.1

West Fork Yaak River, 5500 ft., Lincoln Co., Montana

June 28, 1966

57. ♀ Golden mantled Ground Squirrel ^{embryos} 2 mm 232.3 gm

West Fork Yaak River, 5000 ft., Lincoln Co., Montana June 29, 1966

58. Frog

1/2 miles East of Davis Mtn, 6200 ft., Lincoln Co., Montana

June 29, 1966

59. Hermit Thrush alcoholic 25.7 gm.

60 ♂ Hermit Thrush 13x8 mm 27.6 gm

61 Hermit Thrush alcoholic 24.3

62 ♂ Boreal Chickadee 9x7 mm 11.5

63 ♂ Pine Grosbeak 11x7 mm 55.4

64 (♂) Cassin's Finch alcoholic 28.8

65 (♂) Cassin's Finch alcoholic 27.1

66 } see following # 26

67 West Fork Yaak River, 5000 ft., Lincoln Co., Montana July 1, 1966

68 ♂? Canada Jay skull not os. 62.6

69 ♂ Lazuli Bunting 8x7 mm 16.8

70 ♂ Mac Gillivray's Warbler 10x5 mm. 11.3

71 ♂ Mountain Chickadee 8x6 mm. 12.1

72 ♀ Yellow-bellied Sapsucker ^{ovary} 5 mm ^{OVUM} 2 mm. no wt.

~~73 ♀ Northern Three-toed Woodpecker~~

Catalogue

R.E. Johnson

West Fork Yaak River, 4200 ft., Lincoln Co., Montana

July 3, 1966

82	♀	Townsend Solitaire	8x6 mm	37 gm
		brood patch present		
83	♀	Northern Three-toed Woodpecker	9x7 mm	50 gm
		brood patch present		
84	♂	Yellow-bellied Sapsucker	3x3 mm	48 gm
		brood patch present		
85	♂	MacGillivray's Warbler	7x4 mm	10 gm
86	♂	Winter Wren	7x5 mm	7.5 gm

July 4, 1966

87	♂	MacGillivray's Warbler	alcoholic	11.5 gm
88	♂ (?)	Wilson Warbler	brood patch present (alcoholic)	6.8 gm
89	♂	Northern Waterthrush	(skeleton)	
90	♂	Northern Waterthrush	4x3 mm	17.5 gm
91	♂	Northern Waterthrush	6x4 mm	16.5 gm
92		Toad		

July 5, 1966

 $\frac{3}{4}$ mile northeast of Northwest Peak, 6800 ft., Lincoln Co., Montana

92. Toad

West Fork Yaak River, 4200 ft., Lincoln Co., Montana

July 4, 1966

93	♀	Audubon's Warbler	ovary 7x3 mm	ovum $\frac{1}{2}$ mm	10.5
----	---	-------------------	--------------	-----------------------	------

2 $\frac{1}{2}$ miles E. of Northwest Ph., 5800 ft., Lincoln Co., Montana

July 5, 1966

94		Mtn. Chickadee			12.2
95		Mtn. Chickadee			9.5
96	♀	Fox Sparrow	ovary 7x5 mm	ovum $1\frac{1}{2}$ mm	

Catalogue

R.E. Johnson

$\frac{3}{4}$ mile northeast of Northwest Pk, 6800 ft., Lincoln Co., Montana

July 5, 1966

- | | | | | |
|-----|---|------------------------|-----------|----------|
| 97. | | Olive-sided Flycatcher | alcoholic | 29.5 gm |
| 98. | ♂ | Townsend Solitaire | 7x12 mm | 32.5 gm. |

$\frac{1}{4}$ mile NE of Northwest Pk, 7400 ft., Lincoln Co., Montana

July 6, 1966

- | | | | | |
|-----|--|--------------------|-----------|---------|
| 99. | | Townsend Solitaire | alcoholic | 31.5 gm |
|-----|--|--------------------|-----------|---------|

West Fork Yaak River, 5000 ft., Lincoln Co., Montana

July 7, 1966

- | | | | | |
|-----|---|-------------|---------|--|
| 100 | ♂ | Stellar Jay | 11x5 mm | |
|-----|---|-------------|---------|--|

$\frac{1}{2}$ mile E. of Davis Mtn, 7200 ft., Lincoln Co., Montana

July 7, 1966

- | | | | | |
|-----|---|-----------------------|-----------------|-------|
| 101 | ♀ | Clark Nutcracker | ovary
6x4 mm | |
| 102 | | White-crowned Sparrow | alcoholic | 24 gm |

1 mile E. of Davis Mtn, 6000 ft., Lincoln Co., Montana July 7, 1966

- | | | | | |
|-----|--|--------------------|-----------|--------|
| 103 | | Mountain Chickadee | alcoholic | 9.5 gm |
|-----|--|--------------------|-----------|--------|

$\frac{1}{2}$ mile E of Northwest Pk, 7200 ft., Lincoln Co., Montana

July 8, 1966

- | | | | | | |
|----------------|---|------------------|-----------------|----------------------------|----------|
| 104 | ♂ | Warbler (sp?) | skull not os. | Testes
$\frac{1}{3}$ mm | 10.0 gm. |
| 105 | ♂ | Clark Nutcracker | 5x3 mm
ovary | | 14.8 gm |
| 106 | ♀ | Varied Thrush | 5x3 mm | | 86.5 gm |
| 107 | | Frog | | | |
| 108 | | Frog | | | |
| 109 | | Frog | | | |

Catalogue

R.E. Johnson

West Fork Yaak River, 5200 ft., Lincoln Co., Montana

July 8, 1966

107 Frog

108 Frog

109 Frog

Pete Creek, 4000 ft., Lincoln Co., Montana

July 9, 1966

110 Frog

111 Frog

112 ♂ Empidonax sp? 5x3mm 10.0gm

113 ♂ Yellow-bellied Sapsucker 2x1mm 46 gm

brood patch present (see # 113)

114 ♀ Yellow-bellied Sapsucker ovary 5x6mm ovum 1mm 49.5gm

brood patch present

(# 113, 114, & 14289 of W.C. Russell all fed young of the same nest)

115 Golden-Crowned Kinglet 6.0gm

116 Red-breasted Nuthatch 10.8 gm

117 Red-breasted Nuthatch 9.5gm

118 Mountain Chickadee 10.7gm

Johnson, R.E.

1966

Journal

Montana

Journal

Johnson, R.E.
1966

MVZ, Berkeley, Calif. to Wells, Nevada

June 13

Our happy (?), bleary eyed, five man crew of Dr. Peter Ames, Ward Russell, Dave Conard, Dave Moore, and myself left the Museum around 7 AM, after having waited since 5:30 AM for the arrival of Dave "Sleepy" Moore, who had conveniently changed addresses so no one could find him. This seemed a fitting start for a trip that was originally scheduled to go to the Bighorn Mtns. of Wyoming, but (due to the extreme kindness of the Wyoming Game and Fish Commission which ^{would only} allow ~~us~~ us to take the exorbitant total of 3 bird species plus a few shrews, moles, & rodents, [sarcasm intended]) which ended up headed for an unknown destination somewhere in the northwest corner of Montana. The object of the trip is to ~~catch as many fish as possible~~ (oops), determine the extent of "slopover" of coastal fauna into the NW. corner of Montana.

This first day was mainly a mad dash (with Russell driving the lead truck, it sometimes resembled a mad "creep") to get back on schedule (i.e. reach Wells, Nevada by dusk) & this we did in spite of my own protests to visit every mtn. peak along our route. We camped behind a billboard in a clearing in the sagebrush about 10 miles north of Wells, and fell asleep to the sweet hum of diesel trucks on the highway.

Johnson, R. E.
1966

Journal

Wells, Nevada to Ninepipe National Wildlife Refuge, Montana

June 14

Up early and on the road (US 93) through Jackpot (^{Nevada}~~Idaho~~), Twin Falls (Idaho), Sun Valley, over Galena Pass (8752 ft.), and through Salmon, Idaho, then up again over Lost Trail Pass into Montana and down the Bitterroot Valley to Missoula. In southern Idaho + perhaps northern Nevada we noticed Barn Owls foraging in broad daylight in the morning (until 10 AM). There was some disagreement as to whether all individuals seen were Barn Owls (some were seen clearly & definitely were Barn Owls; others may have been short-eared Owls).

After supper we visited with Dr. Taber of Univ. of Montana, Missoula, and obtained some information on habitats in N.W. Montana, etc. Then we dashed off again to Ninepipe Refuge to spend the night.

Ninepipe Refuge to Spar Lake, 3300 ft., Lincoln Co, Mont.

June 15

Again up with characteristic Russell earliness and on to Kalispell. We seemed destined to remain there for the next forty years. The maps I had ordered to be sent to Kalispell for our trip arrived in a mail delivery that was 3 hours late (i.e. late train). One truck had a dead battery and later refused to shift gears.

We checked in at the Montana Fish and Game office in Kalispell and Mr. Brown gave us a warm welcome and considerable help. Later we visited the Forest Service offices in Libby and Troy and

Journal

Johnson, R.E.
1966

Nine Pipe Refuge to Spar Lake (cont.)

June 15

again we were greeted warmly and given further aid. In fact we now had enough "advice" to keep us going for a couple of summers. It remained for us to match our fanciful dreams & mental pictures with the hard facts of the real world. We were primarily hunting for coastal rain forest and had been directed to Ross Creek Grove of Western Red Cedar. On arrival, however, we found that the picnic area there did not have adequate space for our large museum tents and so we attempted to back-track a bit & drive over to Spar Lake.

Many hours & miles later, having taken all the wrong roads that existed in the area, we finally reached Spar Lake. By this time our trip had reached the stage of a "comedy of errors" and I, for one, was a bit surprised to find that we were indeed not lost after all. Even so, our spirits were higher than ever and we assembled camp and prepared for the collecting to be done the following day.

Our camp is in a Forest Service campground on the west shore of Spar Lake in tall timber (100+ ft.) and therefore shaded throughout most of the day. Campground facilities include tables, pit toilets, piped water, garbage cans, and fire places.

Journal

Johnson, R. E.
1966

Nine Pipe Refuge to Spur Lake, Mont (cont.)

June 15

The forest is composed of four species of conifer: Red Cedar, White Pine, Western Hemlock, and Douglas Fir, forming a kind of rainforest, not dissimilar to that found in Glacier National Park west of the Continental Divide beside Lake McDonald. The forest floor is moist and covered with downed timber, moss, & lichens.

Other species present include:

Wakerobin - Trillium ovatum

Smilacina sp.

Fairybells - Disporum

Mtn. Lover - Pachistima myrsinites

Galium sp.

Thimbleberry - Rubus parviflorus

Baneberry - Actaea arguta

Mtn. Maple - Acer glabrum

Red Raspberry - Rubus idaeus

Snowberry - Symphoricarpos alba

Devil's Club - ~~Ophopanax~~ Oplepanax horridus

After 9 PM I took a hike ^{along} ~~around~~ the lake on the road on the west side to the south end of the lake and beyond, crossing Whoopee & Spur Creeks. Both Hermit & Swainson's Thrushes could be heard as well as Varied Thrushes.

Those remaining in camp set a short trap line in the forest behind camp and they also shot a Northern Flying Squirrel (Glaucomys sabrinus).

R.E. Johnson
1966

Journal

Spar Lake, 3300 Ft., Lincoln Co., Montana

June 16

Up early (5 AM) for breakfast and then collecting. Ames & Conrad followed a road to the N.E. along the lake. Russell, Moore, & myself followed the road to the south that I had followed the night before. Initially we travelled together, but gradually we separated, Russell covering the greatest distance (beyond the S. end of the lake & on to the Spar Lookout trail). Collecting was poor. A number of birds were heard but few could be seen, because they were in the tree tops or deep in the forest. Those shot were difficult to retrieve because of the dense forest & understory. Apparently the road cut does not provide sufficient edge for species such as Oregon Junco, etc. Strangely, no Jays or Woodpeckers were seen (also no ~~no~~ nuthatches or chickadees). One gets the impression of a very sterile forest. Species seen ^{or heard} included: Robin, Varied Thrush, Swainson Thrush, Chipping Sparrow, Wilson Warbler, Audubon Warbler, Hammond Flycatcher, Winter Wren, Pine Siskin, & Ruby-crowned Kinglet.

The Winter Wren occurs ~~at~~ in the deep forests adjacent each ~~low~~ fast stream. The Thrushes and Hammond Flycatcher are the most common species in the dense forests.

R.E. Johnson
1966

Journal

14

Spar Lake, 3300 FT, Lincoln Co., Montana (cont.)

June 16

The trapline from last night contained several Peromyscus. Chipmunks occur along the road cut & I collected two (Eutamias ruficaudus?). I also saw a Red Squirrel and one of the others collected one (Tamiasciurus hudsonicus). A western jumping mouse (Zapus princeps) was captured this evening in the snap traps, as well as a Sorex (vagrans?).

Two hummingbirds, both ♀s, were collected along the road cut in the morning (9-10 AM), while they were feeding on willow catkins. They were also observed to feed on the flowers of snowbush (Ceanothus velutinus). One hummer appeared to be a Calliope & the other a Rufous. The latter could have been an immature male. Both were prepared as alcoholics & thus not sexed.

An Olive-sided Flycatcher was heard from ^{the top of a} 150 ft snag beside the rd. This and the Chipping Sparrow were the only edge species (one each). The Wilson Warbler (also one) was in a small opening which contained mtn. Maple & small cottonwoods (Black Cottonwood - Populus trichocarpa).

Before sundown, Ames, Conard, & myself, drove NE along the lake to an old burn visited by Dr. Ames earlier in the day. A few larch trees are coming up in the burn, along with reproduction of the other forest species already mentioned. Woodpeckers

Journal

R.E. Johnson
1966

Spar Lake, 3300 ft., Lincoln Co., Montana (cont.)
and Olive-sided Flycatcher were seen.

June 17

Up a little later than usual. Ward, Dr. Ames and I drove up the road beyond the lake to a burn at road's end. Tall snags & downed logs remained, but the country was quite open & birds were easier to spot and to find after shooting. The bird species present were quite ~~the~~ different than in the forest below.

Clark Nutcrackers were seen in small groups (2-4) and Woodpeckers were common. I collected a Western Tanager (♂), Clark Nutcracker (♂), Oregon Junco, and Yellow-breasted Sapsucker. Stellar Jays, a Red-shafted Flicker, a Cassin's Finch, Mtn. Bluebirds, and some Nuthatches (sp?) were seen &/or heard.

The burn faces SE and some of the trees here are Western Larch (Larix occidentalis). A few Bear Grass (Xerophyllum texanum) plants are in bloom.

There are two bridges across Spar Creek above the lake at road crossings & Dippers have been seen near each of these. There is an active nest located under the upper bridge which is built upon an older nest, giving a two story house appearance. The lower nest was empty. Young are in the upper nest. An old nest is located under the bridge over Whoopee Creek.

A carpenter ant was found in the esophagus

R.E. Johnson
1966

Journal

Spar Lake, 3300 Ft, Lincoln Co., Montana (cont.)
of the aforementioned Clark's Nutcracker when it was skinned.

A pair of Spotted Sandpipers were seen ~~nest~~ in the evening on the lake shore near the campground.

In the evening Ward & Dave Conard drove up & set ^{snap} traps along the Spar Peak Trail. The remaining 3 of us drove up that way a little later and saw a Pine Martin disappear into the deep forest. While watching this, we saw & captured a shrew (Microsorex hoyi) that was running across the road. We kept him alive for several hours by feeding him moths, etc, which he ate greedily.

Returning to camp along the road we noticed that Varied Thrush's were commonly flushed from the roadside. They had been high in the trees & impossible to see all day.

June 18

Up early. Winter Wren, Varied Thrush, & Hammond Flycatchers sing around camp as usual. Two Zapus princeps were caught in snap traps near camp & set the night before by Conard.

Conard & Ward went to collect their traps from the Spar Lake Trail. Moore, Ames, & I drove to the same location approx. but fanned out to collect birds. Ames revisited the burn and collected a Red-breasted Nuthatch & Golden-crowned Kinglet, among others. Moore came up with the grand prize, a Pygmy Owl. I hiked up the Little Spar Lake

Journal

R.E. Johnson
1966Spar Lake, 3300 Ft., Lincoln Co., Montana (cont.)

June 18

Trail to near the Idaho border. The trail follows the canyon bottom and crosses Spar Creek once. It passes beneath the cliffs of Spar Pk. There are many openings in the timber along the creek, these being principally Alder (Alnus tenuifolia) and Devil's Club thickets. A few birds were heard from these patches (ex. MacGillivray's Warbler) but these were impossible to see or get a clear shot at.

In deeper timber on a steep SE slope a large Porcupine was seen moving slowly along the forest floor. A ♀ (?) [or Immat.] Rufous Hummingbird was collected from a low (15 ft.) limb of a 150 ft. conifer in dense forest (no openings). A Red-breasted Nuthatch was shot from the top of a 150 ft snag. A winter wren (♂) was collected from a stump top where it sang in an opening in the dense forest near a roaring side stream to Spar Creek. All species were collected at approx. 4700 ft. Grand Fir was present here.

A Red Squirrel was shot along the rd on the west side of the lake and was later used by Ward for Marten bait for a trap.

In the evening Moore, Ames, & I tried a rerun of last night's procedure of flushing roadside birds at 8-9 PM. This time only a couple Varied Thrushes were seen & these were high on the upper road bank. More Thrushes were heard however & from very near the road.

Journal

R.E. Johnson
1966

Spar Lake, 3300 ft., Lincoln Co, Montana (cont.)

June 19

Up at 5 AM, rain began at 6 AM (approx). Drove to the burn above the lake (4,700 ft) & hiked up to the ridge above the burn (5000-5500 ft.). Collected from 7 to 10 AM. The rain continued until 9 AM. Seven birds were collected. A mated pair of Hairy Woodpeckers nesting in a 7 ft. snag in the burn (nest 5 ft. up) were collected. Both sexes have a brood patch. The male's testes were quite small. Young could be heard in the nest but could not be reached (the cavity is at least 10 inches deep). Nest hole faces south.

A Red-shafted Flicker nest containing young which called loudly & with nearly adult voices was located 50 ft up in a 100 ft snag just outside the burn. Nest hole faces NE.

From nine to ten AM I collected on the ridge top which is covered with brush & almost no trees. A female Lazuli Bunting, a mated pair of Oregon Juncos & another male Junco were collected, also a ♀ MacGillivray's Warbler. Swifts (sp?) were seen overhead. An Olive-sided Flycatcher & a Robin were seen. Lazuli Buntings were common.

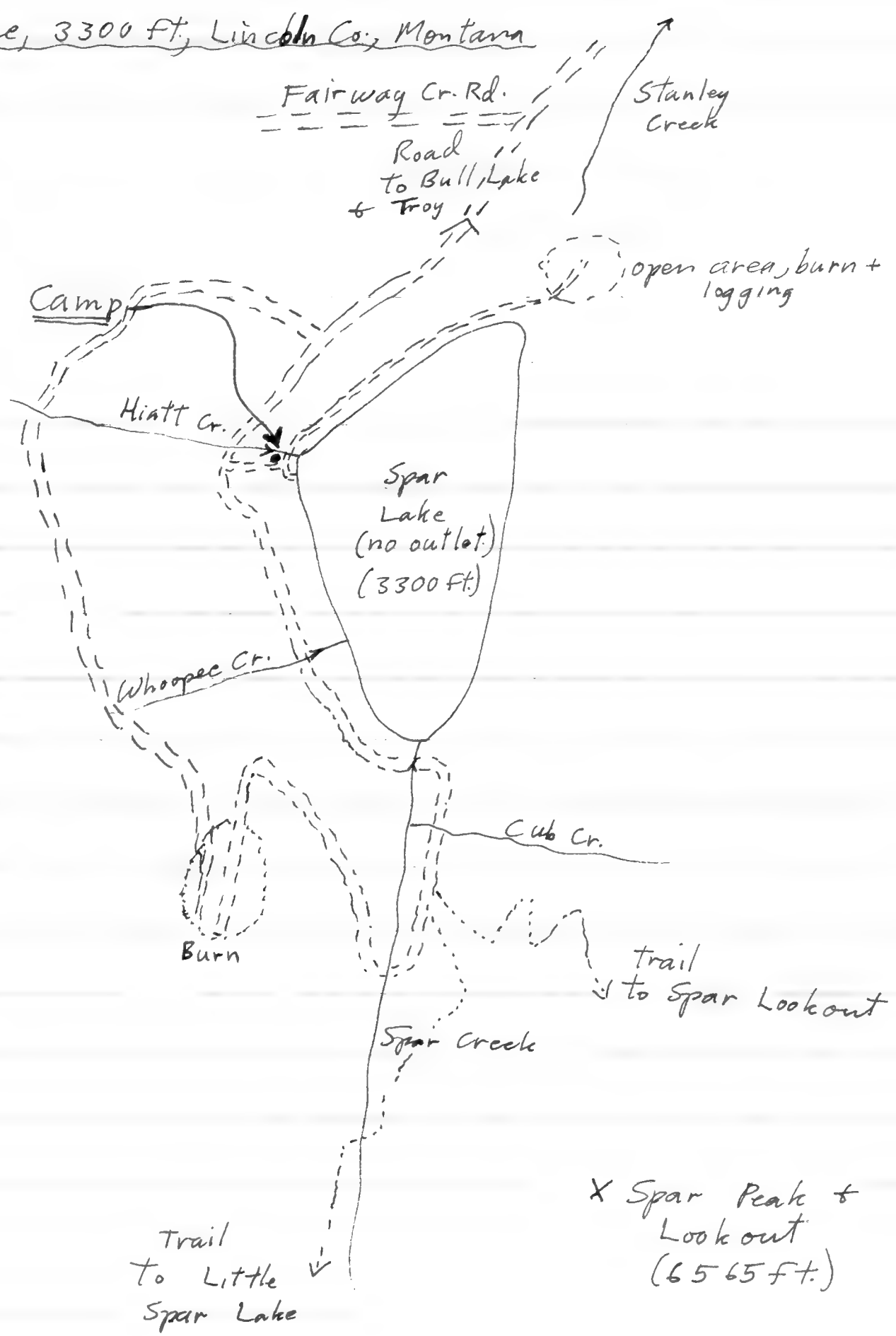
At ten AM a Townsend Warbler & a mixed flock of Evening Grosbeaks & Pine Siskins were heard in the forest beside the burn.

The afternoon was spent skinning as usual. My ability to skin birds is still rather limited & slow. As a group we aren't setting any

Journal

R.E. Johnson
1966

Spar Lake, 3300 ft, Lincoln Co., Montana



R. E. Johnson
1966

Journal

27

Spar Lake, 3300 Ft, Lincoln Co., Montana (cont.)

records for number of specimens prepared, and I'm the slowest of the group.

We all went to check the traps set by Russell & Conrad last night for the Marten we saw earlier. all traps (3) were empty & were rebaited using fish heads from Lake trout caught by another camper in the campground.

June 20

Since we were running low on gasoline, we took both trucks and collected along the way toward town (Troy). We stopped in a logged over area full of cat-trails located approx. $\frac{1}{4}$ mile E & $\frac{1}{2}$ mile N of Spar Lake at 3100 ft. Some tall trees remain, mainly Western Red Cedar, Black Cottonwood, & Western Hemlock. Ground cover includes huckleberry, wild rose, willow, Queenscup Bead Lily, Foam Flower, bracken Fern, red twin berry, service berry, pipsissewa, twin Flower, beargrass, & pink pyrola. Fairway Creek Road runs through the center of the cut.

I collected three birds from the cutover area. A male Western Tanager was taken while singing from the lower side branches of a Western Hemlock. A Yellow-breasted Sapsucker was collected from a cedar trunk, about five feet up. It was a male with a brood patch. One siskin was taken from a small (6) flock which moved rapidly from tree clump to tree clump.

Several Red-breasted Nuthatches and Oregon Juncos

R.E. Johnson
1966

Journal

Spar Lake, 3300 ft., Lincoln Co., Montana (cont.)

June 20

were seen in the same area. A Hermit Thrush sang from an adjacent cedar forest on a steep E Facing slope. I over-turned many logs & some cedar bark strips but could not find any salamanders. The ground was still very moist beneath the logs & bark. Deer tracks were common in the area & Ward says he found Elk & Bear sign.

An Osprey was seen ~~with~~ carrying a large Fish(?) high (200 ± ft) over the Kootenai River, just west of downtown Troy at noon.

A Warbling Vireo was taken at 2400 ft. near the junction of the Keeler Creek Rd & Spar Lake Rd. in Lodgepole Pine & Aspen forest.

On the return trip to camp from Troy Dr. Ames and I drove to Keeler Lookout (4949 ft.). A few drops of rain fell & the skies were dark & cloudy, clouds having built up during the day. (by evening they were gone). Columbian Ground Squirrels were common in the open grassy meadows on top the peak. A Ruby-crowned Kinglet was heard in the tall trees at the edge of the meadow. A red-breasted nuthatch was collected and siskins & thrushes (sp?) were seen. The area seemed alive with birds compared to the forest around Spar Lake. We left the pk. at 2 PM.

I collected a Hammond Flycatcher in the tree tops beside our camp at 7 PM. It has been heard

R.E. Johnson
1966

Journal

24

Spar Lake, 3300 ft., Lincoln Co., Montana (cont.)

June 20 daily, especially in the evenings.

A Robin was collected beside the lake. Several were present in the grassy lake margins.

June 21

Collected a Hammond Flycatcher in camp. It was perched on top of a 100 ft. Lodgepole Pine. WT. 12.4 gm.

Ames, Conard, Moore & I drove to the burn area (referred to as Spar Creek Drainage 4700 ft \pm) via a new route, the Hiatt Creek Rd which splits off from Spar Lake Rd about a half mile down canyon (N.) from camp. This road winds around the headwaters of Hiatt Creek Drainage and terminates above the burn. We collected along this ridge & W. toward the Idaho border. (The burn was first visited on June 17 & later on June 19).

The ridge top has been recently logged (perhaps 2 yrs ago) and only a few snags & living conifers remain. The ground cover consists of:

Mtn. Ash - Sorbus sitchensis

Mtn. Maple - Acer glabrum

Thimbleberry - Rubus parviflorus

Currant - Ribes sp.

Gooseberry - Ribes sp.

Mtn. Lover - Pachystima myrsinites

Huckleberry - Vaccinium sp.

Menziesia - Menziesia glabella

Thin-leaf Alder - Alnus tenuifolia

R.E. Johnson
1966

Journal

Spar Lake, 3300 ft., Lincoln Co., Montana (cont.)

June 21

Meadow Rue - Thalictrum occidentale

The timber resumes (ie. no cut) at the west end of the ridge (higher elevation) and Menziesia is the prominent understory vegetation (75% ~~of~~ ground cover).

A Yellow-breasted Sapsucker was taken from a large larch tree within the cutover area. It was a male with a brood patch. A male Lazuli Bunting (no brood patch) was taken from a snag surrounded by brush. Buntings are common on the ridge. Only the Rufous hummingbird is more common. These may be seen on the tops of 20-30 ft trees. Usually 2 or 3 may be seen in different directions at any time.

Woodpeckers (Sapsuckers & Red Shafted Flickers) are common. Young Flickers were heard calling from trees at the edge of the cut in three different locations (one of these being the nest observed on June 19), implying 3 different nests(?). These were no more than 50 yds apart. Olive-sided Flycatchers are fairly common, usually feeding from tall snag tops. A Warbling Vireo sang from a low tree. Columbian Ground Squirrels were common, as are Chipmunks. Swainson's Thrush can be heard singing from the timber at edge of the cut. Clark's Nutcrackers & Stellar's Jays were common toward the west end of the ridge. A Blue Grouse was seen along one of the skid trails. Moore collected a Townsend's Solitaire.

Journal

R.E. Johnson
1966

Spar Lake, 3300 Ft., Lincoln Co., Montana (cont.)

the first seen on our trip. Mtn. Bluebirds were seen and one collected by Conard on the burn. Snow remains on the north slope of the ridge (Hiatt Creek Drainage) and in these snowy locations willows predominate.

June 22

Immediately following breakfast a loud call was heard from the road above camp & Ames dashed off and found a Goshawk^x attacking a Horned Owl^x. He shot & ~~he~~ killed both with one shot, adding two species to our list.

Ames, Moore, & I drove to Keeler Mtn. I collected ^{crowned} 2 Pine Siskins, 2 adult and one Imm. Golden Kinglet, one Red-breasted Nuthatch, one Townsend Warbler^x, & one Pine Squirrel. In addition I saw the following species: Oregon Junco, Chickadee sp?, Audubon Warbler, Swainson Thrush, Warbling Vireo, Ruby-crowned Kinglet, & Creeper. We all saw a pair of Pine Grosbeaks^x and Moore collected the female. He also collected a pair of Cassin's Finches^x, a Mtn. Chickadee^x, & a Townsend Solitaire. Ames & Moore saw a Blue Grouse with 5 or 6 young.

Conard & Russell drove to the logged over area on Fairway Creek. Conard collected a Red-shafted Flicker^x, Cedar Waxwing^x, & Ruffed Grouse^x. Russell collected 2 Pygmy Owls by calling them.

In all, nine new species were collected (marked

Journal

R.E. Johnson
1966

Spar Lake, 3300 Ft., Lincoln Co, Montana (cont.)

with x) and more species were stuffed than usual. Perhaps we are finally getting the hang of this business (we hope).

June 23

All five of us drove to Keeler Mtn. and the rain almost beat^{us} there. It was very cold when we arrived there & no mosquitos were seen, but they came on in droves as the morning passed. I collected a Swainson Thrush, Ruby Crowned Kinglet, Hermit Thrush, ~~the~~ Oregon Junco, & Chipping Sparrow. (Ward Russell prepared the Kinglet for me). I also saw Pine Siskins and a Blue Grouse with at least 4 chicks that she was brooding which I stumbled upon in the same area where Moore saw some yesterday (vegetation 1-2 Ft. high, mostly huckleberry). Most of my time was spent trying to get a clear shot at the one Ruby-crowned Kinglet. It remained high in tall trees (fir, ~~spruce~~) & rarely on the ends of the branches. It sang almost continually. Finally I tried a Pygmy Owl call and it flew down to 15 ft where I shot him. Columbian Ground Squirrels are very common. Chipmunks are present also. Ames tended his trap line set in the meadows on top the peak and found many traps missing & most sprung, apparently all due to Ground Squirrels. He also found 2 Microtus sp.

Swainson's Thrush, Ruby-crowned Kinglet, & Oregon Junco all seem to respond to Pygmy Owl calls by

Journal

R. E. Johnson
1966

June 23

Spar Lake, 3300 Ft., Lincoln Co., Montana (cont.)
coming closer & singing loudly (Swainson Thrush) or
chirping (Junco). Moore said that the Chipping
Sparrow also responds (apparently like the Junco).

Moore & Conard saw a Pileated Woodpecker
but were unable to collect it.

Two new species were collected on Keeler Pk.
(Hermit Thrush + Ruby-crowned Kinglet) by me and
another (Black-capped Chickadee) by Russell.

The top of Keeler Pk is open meadow
containing a Lookout tower (US Forest Service; unoccupied).
The following plant species were noted:

Lupine (blue flower).

Mariposa Lily - Calochortus

Alum Root -

Mtn Lover - Pachistima myrsinites

Huckleberry - Vaccinium

Service

Serviceberry - Amelanchier alnifolia

Eriogonum

Creambush - Holodiscus discolor

Beargrass - Xerophyllum tenax

Stonecrop - Sedum

Delphinium

Valerian sitchensis

Cherry - Prunus (metanocarpa?)

Parsley - Lomatium sp.

R.E. Johnson
1966

Journal

29

Spar Lake, 3300 Ft., Lincoln Co., Montana (cont.)

The surrounding Forest is primarily Douglas Fir, Lodgepole Pine, & Western Larch. Birds were taken along the forest-meadow edge and along the road through the forest. There is very little understory in the forest here making it easy to locate birds which have been shot. Few birds were seen in the meadow itself and no wholly meadow species (ie. Meadowlark, Horned Lark, Pipit, etc) were found. Apparently this area is too small and/or isolated to attract these species. The meadow extends as a narrow sliver along the top of the peak, widening as it goes north & then extending a quarter mile down the north ridge.

Earlier in the day, on the rd near Spar Lake Moore & I saw a Mourning Dove, the first seen in this area.

June 24

Rain fell most of the night and continued throughout the morning. We all drove out to collect anyway. Ward & Conrad came back with a Pine Marten from the trapline above Spar Lake, & a Pileated Wood pecker. Ames, Moore, & I drove back to Keeler Mtn. Ames picked up his trap line of gopher traps and found 2 pocket gophers (Thomomys talpoides) of quite different color, collected no more than 40 ft apart. Six traps were empty & one could not be located. I collected 2 Townsend

R. E. Johnson
1946

Journal

Spar Lake, 3300 ft., Lincoln Co., Montana (cont.)

June 24

Warblers (one put up by Leonard), an Oregon Junco, a Chipping Sparrow, and Mtn Chickadee. Moore spent his time following a Pileated Woodpecker and again was skunked. This was his 3rd time to see one on Keeler Pk.

In route to Keeler Pk we saw a Red-tailed Hawk perched on the top of a tree along the road & Ames winged it. It fell & glided down to roadside where we captured it alive and had considerable difficulty killing it via the usual method (squeezing breast, etc). Later in the day I skinned it & salted it.

Rain continued off & on in the afternoon and evening. We went to Libby to pick up mail, buy groceries, & do laundry. Tomorrow we break camp & head for the Yaak River area north of here.

Spar Lake to Yaak River, Lincoln Co., Montana

June 25

In the morning we packed up our camp to move north to the Yaak River. Fortunately the rain stopped during the previous night and we could pack under dry conditions. I shot a Hammond Flycatcher in the Campground in ^{the top of} a Western Cedar tree next to the lake. I also took some pictures of the Sandpiper (Spotted) nest near the boat landing area. The nest was located 40 ft from the lake on the ground and was a grassy cup with

R. E. Johnson
1966

Journal

Spar Lake to Yaak River, Lincoln Co., Montana (cont.)

June 25

3 brown spotted eggs. A peculiar sequence of events was noted. A Robin flew to where one of the adult sandpipers was standing beside the lake and the sandpiper "begged" (chirping, wing fluttering, crouching) & the robin fed it. Later ~~the~~ a robin was seen to approach the sandpiper nest with food in its beak. However I apparently scared it off. The adult sandpiper was not on the nest at the time.

A search of the Spar Lakeshore was made for amphibians. ~~4~~ Four eggs individually attached to branches located in shallow water (6 inches) were found



and another egg mass was



found, also in shallow water.

Both sets of eggs were within a foot of shore.

Four Common Goldeneye (♀'s &/or Imm.) were seen far from shore in Spar Lake.

We arrived in Libby, Montana just before 12 noon, where we made several stops and then drove on to the Yaak River. We explored the road net along the Yaak River from Yaak east to Caribou Campground and Creek and finally returned to Yaak and west to Pete Creek. We followed a road up Pete Creek (north) to the West Fork of the Yaak and then followed the latter west toward its headquarters to a point at about 5000ft near a bridge over the river. A young male moose was standing beside our prospective campsite when we

R.E. Johnson
1966

Journal

June 25

Spar Lake to Yaak River, Lincoln Co., Montana

arrived. This location is higher, colder (burr), & and in more open forest than our Spar Lake camp.

We saw an Osprey nest in the valley bottom of the Yaak River (3000 ft.) before we headed for our new campsite. Both adults were seen sitting in nearby snags. The Yaak Valley is largely open meadows and grassland with occasional Lodgepole Pine stands.

I collected 3 Frogs from a small pond in a clearing in a Lodgepole Pine Forest on the O'Leary Ranch in the Yaak Valley (3100 ft.). W.C. Russell cataloged these.

June 26

West Fork Yaak River, 5000 ft., Lincoln Co., Montana

The same moose was again seen near camp at 5:30 AM. I collected along the road which follows up the north west side of the west fork of the Yaak River. Birds were much more common than at Spar Lake. The following specimens were collected:

Wilson's Warbler - 2 shot in alder & willow thicket.

Canada Jay - 2 Imm. (2 of a group of 3)

Cassin Finch - ♀

W.C. Sparrow - ♂

Chipmunk - 2

Red Squirrel.

Other birds seen included Audubon Warbler, Olive-sided Flycatcher, Yellow-bellied Sapsucker, Varied Thrush, Clark Nutcracker, Oregon Junco, Lazuli Bunting, Sparrow Hawk,

Journal

R.E. Johnson
1966

West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.)

June 26

Stellar Jay, Winter Wren, Robin, Hairy Woodpecker, and Mtn Chickadee. A nest of a Hairy Woodpecker was found near the top of a 30 ft snag in a logged over area. ^{The ♀ was seen to enter the hole to feed young.} The nest hole faced south. A Mtn. Chickadee nest was found near the top of a 30 ft snag in a forested area. Adults were seen carrying food. The nest hole faced SE.

After collecting was finished I hiked to the end of the road (ie. head of valley) to get a better view of routes in the alpine areas. Cliffs on the north-east face of a portion of Rock Candy Mtn appeared to be ideal Rosy Finch nest sites. Considerable snow (probably permanent) lies below the cliffs.

I collected a Frog and a toad from a small pond next to camp. The pond is filled with small horse tail plants. Later in the evening I hiked up Davis Creek Road and after dark I collected a large toad from roadside in a higher timbered area (5500 ft.).

June 27

I hiked up the road up the Yaak River (West Fork) to road's end and then up into the alpine areas I had looked up at yesterday. Beavers dams & many streams occupy the upper end of the valley (a cirque). I went up the north side through downed timber, Menziesia, Huckleberry, Alpine Fir, Indian Warrior, Englemann Spruce, etc. A MacGillivray's Warbler was collected in a Menziesia bush. Hermit Thrushes & Olive-sided Flycatchers could be heard below.

Journal

R. E. Johnson
1966West Fork Yaak River, 5000 Ft., Lincoln Co., Montana (cont.)

June 27

A higher side cirque is soon reached extending at right angles to the main canyon (to the north). The floor of this higher valley is flat and broad and subalpine in nature. Engelman Spruce, Alpine Fir, & Snags are scattered through the area (also Alpine Larch). Ground cover includes Glacier Lily, Beargrass, Globeflower, & Sedge. Patches of snow cover 10% of the area.

A Hairy Woodpecker was collected from a snag. Clark's Nutcracker, Hermit Thrush, White-crowned Sparrow, and Pine Siskins were seen. Cong's & Hoary Marmots were heard in the rock slides on the west side of the cirque. This side was ascended in pursuit of a pair of Townsend Solitaires which I failed to collect. Mtn. Bluebirds were also seen.

Upon reaching the ridgetop above the ~~the~~ cirque, I went north along the ridge toward the head of the cirque & Mt. Ewing (7536 Ft.) [referred to on labels as "Pk west of Davis Mtn."]. The ridgetop is rocky with occasional patches of turf. Boulder slides extend down the east slope into the cirque. Formed soil extends up the west slope & often is forested with Spruce & Fir. Snow overhangs much of the east slope in cornices, but the ridgetop itself is generally free of snow. The turf patches include: Glacier Lily (Erythronium grandiflorum), White Heather (both Phyllodoce glanduliflora & Cassiope mertensiana), & Spring Beauty (Claytonia lanceolata). The remains of winter Microtus runways were seen in several places.

R.E. Johnson
1966

Journal

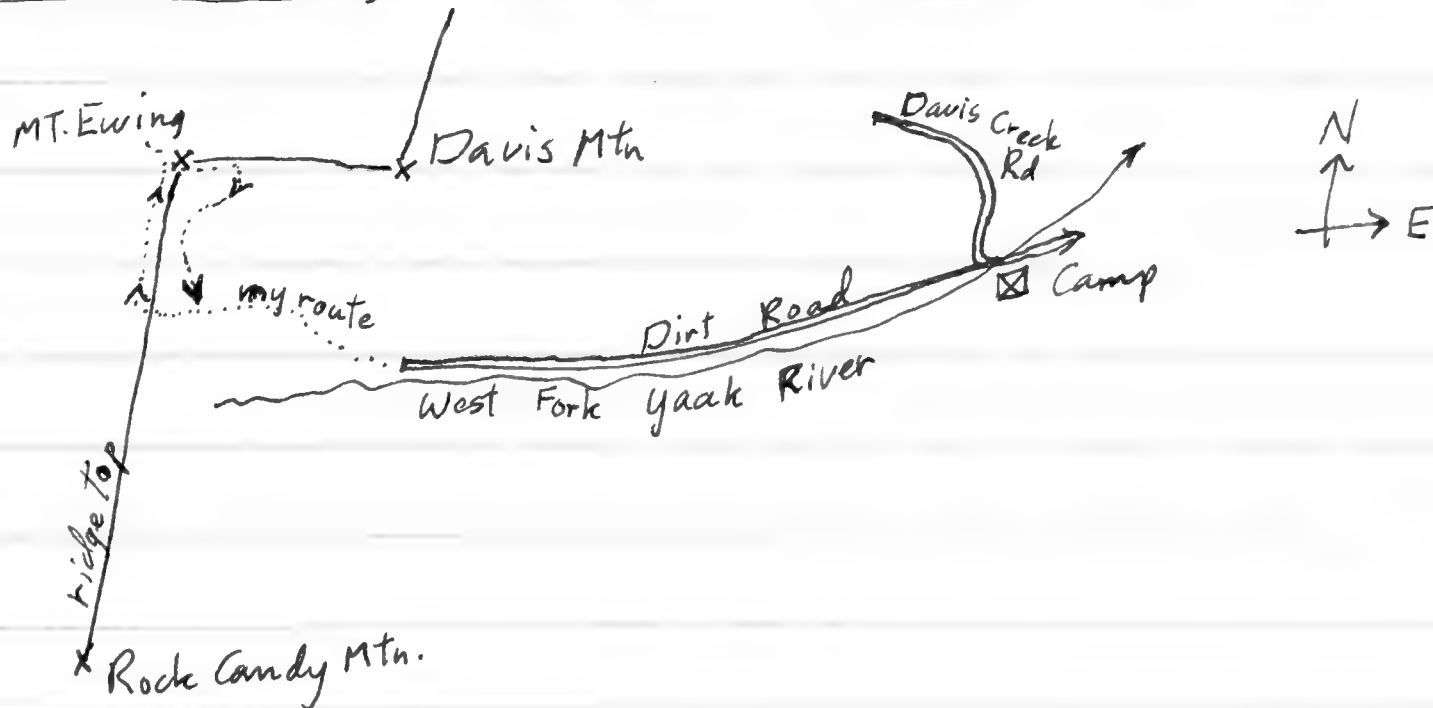
West Fork Yaak River, 5000ft., Lincoln Co., Montana (cont.)

June 27

An Oregon Junco was taken on the ridge & several others were seen. A Rock Wren was heard singing from the east slope rock slides near Mt. Ewing.

A deep cirque lies to the north of Mt. Ewing containing a pretty lake, still partially frozen over. The head of this cirque contains considerable snow & has cliffs which appear suitable for rosy finch nest sites. However none were heard or seen from above. I did not have time to descend into this cirque. Clark's Nutcrackers, Oregon Juncos, & a Rock Wren were heard in the cirque.

I returned to the road on the West Fork of the Yaak River by dropping into the head of the 1st mentioned cirque & following the lower slopes of Mt. Ewing & the ridge back south. The first mentioned Rock Wren was collected and Chipping Sparrows, Varied Thrushes, & a Red-shafted Flicker were seen.



Journal

R.E. Johnson
1966

West Fork Yaak River, 5000ft., Lincoln Co., Montana (cont.)

June 27

Ward collected Marmots, Conys, & Golden-mantled Ground Squirrels. Moore brought in a Brown-capped (Boreal) Chickadee, our first, making four species of chickadees (Mtn, Chestnut-backed, & Black-capped) collected in Lincoln Co. Chickadees have been scarce throughout our trip.

June 28

I went up the road again to road's end and then headed south up the talus slope of the canyon wall toward the northernmost extensions of Rock Candy Mtn. A Golden Mantled Ground Squirrel was collected along the road (5500 ft.) and a Cony was taken in the rock slides (6200 ft.). Pine Siskins, Oregon Juncos, Mountain Bluebirds & Townsend Solitaires were common ^{high} on the peak (7000 ft.). A Red-shafted Flicker was also seen. Three Mtn. Bluebirds (1 ♀, 2 ♂) were collected and also a Townsend Solitaire. Solitaires, Bluebirds, & Juncos were all observed to feed on insects on the snow surface in a similar manner to rosy finches & pipits.

The cliffs above the extensive snow fields on the north slope of Rock Candy Mtn were searched thoroughly for rosy finches. Two fecal sacs were found on the snow but they may not have been from finches. No other sign of rosy finches was found. The cliffs are not so high & protected as in Glacier Nat. Park, but the snow does appear to be permanent and I can see no immediate reason for the absence of

Journal

R.E. Johnson
1966West Fork Yaak River, 5000 ft, Lincoln Co., Montana (cont.)

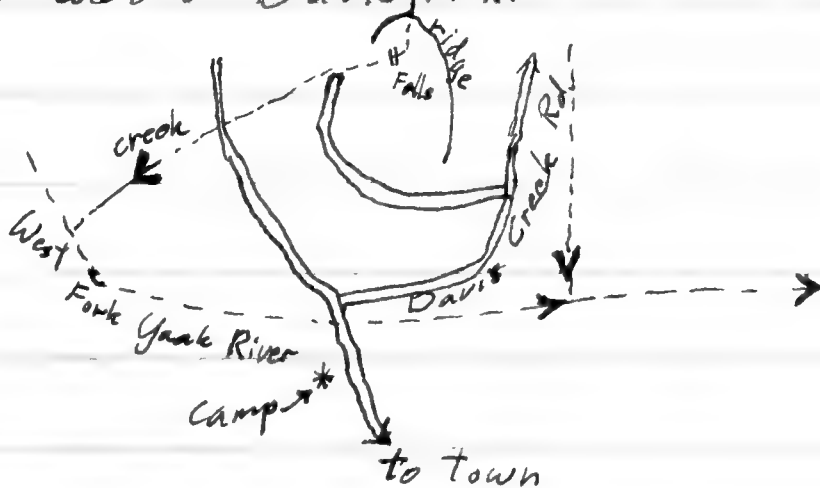
June 28 Rosy Finches.

Extensive turf patches occur on the ridgetop just north of Rock Candy Mtn. These are made up of sedge, glacier Lily, Spring Beauty, and huckleberry. Creeping Juniper (Juniperus communis) occurs in patches on rocky soil. The turf looked adequate for pipit nesting, however it was raining and I rushed on in a hurry. No pipits were seen or heard.

An old Lookout (abandoned) is located on the top of Rock Candy Mtn (7245 ft.). A Rock Wren was heard on its SE slope. Some cliffs & snow are located on a shoulder above Spread Creek are much lower in elevation but might be adequate for rosy Finches. There was not time to check these cliffs.

June 29

I hiked up the Davis Creek road & then took a switchback (a skid trail at the beginning but becoming a good road) which runs south, then west above the Yaak River until it deadends at a high ^{creek} on the ridge east of Davis Mtn.



Journal

R.E. Johnson
1966

West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.)

June 29

Vegetation along the lower part of the Davis Creek Rd consisted of Lodgepole Pine, Douglas Fir, Western Larch, & White Firs overstory and Menziesia, Bear Grass, Thimbleleaf Alder, & Mtn. Ash as understory.

A Boreal Chickadee, Cassin's Finch (#65), & a Frog were collected. Oregon Juncos, Chipping Sparrows, Clark's Nutcrackers, Western Tanagers, Pine Siskins, Red-breasted Nuthatches, Townsend Warblers, & Varied Thrushes were seen.

Between road's end and the small waterfall (30 ft. high) upcreek, Hermit Thrushes were heard & Four were collected. The slopes above the creek to the west are open with few trees and considerable rock. Small brooks flow down in several places. Alder is the dominant ground cover, but a few Larch & alpine Fir occur. Birds include White-crowned Sparrow, Audubon Warbler, Fox Sparrow, & Olive-sided Flycatcher. Glacier Lilys were present in some places.

Above the waterfall, the creek extends up a short, open, rocky valley toward Davis Mtn. Beargrass & willows were common ground cover but patches of forest also occur. A Cassin's Finch (Imm., #64) was taken while singing from the top of a snag.

I ascended the ridgetop leading to Davis Mtn. Considerable snow remains on its

Journal

R.E. Johnson
1966West Fork Yaak River, 5000 ft., Lincoln Co., Montana. (cont.)

June 29 North slope. A pair of Townsend Solitaires were seen flying in a mating flight in the thin timber near the ridgetop. The ^{apparent} female flew in an elongate ellipse back & forth through the timber at a leisurely pace. The male followed a few feet behind singing a few notes. The female would reverse directions at the end of the ellipse by circling a tree rather closely. This flight continued for more than 15 minutes & was still in progress when I left. The birds did not land at any time during this flight. The length of the ellipse ~~was~~ varied from 100 to 300 feet.

June 30 We all drove in the G.M.C. to Bonner's Ferry, Idaho to pickup mail, get fishing worms for Conrad & Russell, get showers, groceries, mosquito repellent, etc. On the return trip we stopped at the "Dirty Shame" at Yaak to borrow a crosscut saw. In the evening we cut a large log off the West Fork Yaak River Rd. which will now permit us to drive to the head of the canyon saving considerable time when traveling to the higher peaks or Ward's trap lines.

July 1 I walked up the Davis Creek Rd a short ways (no more than a mile from camp). The following species of vegetation were noted in the forest along the lower part

Journal

R.E. Johnson
1966West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.)

July 1

of the road (these to be added to those of June 29.):

Western Red Cedar & Engelman Spruce. Understory -

Corn Lily (*Veratrum viride*)Fireweed (*Epilobium angustifolium*)Foamflower (*Tiarella unifoliata*)Queencup Beadlily (*Clintonia uniflora*)Solomonseal (*Smilacina stellata*)Meadowrue (*Thalictrum occidentale*)Huckleberry (*Vaccinium* sp.)Elderberry (*Sambucus melanocarpa*)Baneberry (*Actea rubra*)Fairy bells (*Disporum* sp.)Gooseberry (*Ribes* sp.)

Arnica

Two Chipmunks, a Yellow-bellied Sapsucker, a Canada Jay, and a Varied Thrush were collected in this lower area. Pine Siskins, Red-breasted Nuthatches, Wilson's Warblers, & Oregon Juncos were seen.

Further up the road in an open cut-over area I collected a Lazuli Bunting, a MacGillivray Warbler, a Mtn. Chickadee, & a Golden Mantled Ground Squirrel. Trees remaining were Alpine Fir & Douglas Fir. Dominant ground cover was Menzesia, Elderberry, & Thimbleberry.

July 2.

The weather looked bad (dark & 101% chance of rain) so I canceled my plans for a trip to the peak tops. Instead, another trip up Davis Creek, this

R.E. Johnson
1966

Journal

41

West Fork Yaak River, 5000 ft, Lincoln Co., Montana (cont.)

July 2

Time to the upper end of the road & back on the road on the opposite side of the creek (a branch of Winkum Creek Rd.). Heavy rain began when I reached the upper end of the road, my farthest departure from camp. Fortunately I came upon Ames & Moore in the truck & was rescued from drowning.

Before meeting them (upper Davis Creek) I collected the following pairs of woodpeckers at their nests in cut over areas:

Yellow-bellied Sapsucker - 2 pairs

① nest 75 ft up in snag. Nest hole faces East.

both adults have ants in beak.

both have brood patches

② nest 50 ft. ~~3~~ up in snag. Nest hole faces North.

both adults have ants (carpenter ants) in beak

both adults have brood patches.

Hairy Woodpecker - 1 pair

After riding a short ways in the truck the rain stopped briefly & we stopped where Winkum Creek Rd crosses the West Fork of the Yaak River and collected in a logged over area. Dave collected a Spotted Sand piper. I found a Northern Three-toed Woodpecker nest & collected both adults. The nest was 15 ft. up and facing East in a snag (20 ft high). I also collected 2 White-crowned Sparrows & a Pine Siskin that were feeding separately on the ground in the open area.

R.E. Johnson
1966

Journal

42

West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.)

July 2 The Siskin had many small ($\frac{1}{2}$ inch \pm) yellow grubs in its mouth. This location was at 4800 ft. The latter 3 specimens were prepared by Ames + Moore. Ward caught a Short-tailed Weasel near camp.

July 3 Ames, Moore, + I drove down the road to the Carver Creek Rd. + followed it to the Carver Creek Crossing (4200 ft.). We collected in the forest + logged areas near this point. I collected a female Northern Three-toed Woodpecker from a Western Hemlock tree (20 ft up). The tree was riddle with Sapsucker holes. A Yellow-bellied Sapsucker flew to a nearby tree and was collected. Dave Moore collected a male No. Three-toed Woodpecker from a location 200 to 300 yds. away.

Oregon Juncos, MacGillivray's Warblers, + Wilson Warblers responded to the "Pish" call. Townsend Warblers were heard in forest (high up) + the former species were in the understory. A MacGillivray's Warbler was collected.

In a logged over area families of Oregon Juncos + Winter Wrens were seen. The wrens were in a log pile + one was collected. A Red-Tailed Hawk flew up from the ground (exact location + activity not seen) + while being mobbed by small birds. It lit in a 40 foot tree in the forest nearby + then flew again, pursued by a large Corvid.

A chickadee nest (sp.?) was found at the edge

R.E. Johnson
1966

Journal

43

West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.)

July 3

of the cut area in a snag about 30 ft. up and facing east. Adults were carrying food to the nest.

On the return drive we stopped briefly at another logged area and I shot a Townsend Solitaire perched on a log.

Moore collected the first Empidonax Flycatcher since we moved north to the Yaak River area. It was in low bushes near Garver Creek. (all the birds in the Snag Lake area were high in conifers & away from creeks). He also collected a ~~Scrub~~ Northern Waterthrush.

It appears that the season is slightly more advanced near Garver Cr. which is 800 ft lower than camp. The 1st young birds out of the nest were spotted there (Junco & Wren). Also the only Waterthrush & Empidonax Flycatcher were found there.

July 4

We returned again to Garver Creek and I collected within an alder thicket near the creek. The overstory was 1-2 ft (dbh) Douglas Fir & Engelman Spruce. The forest floor was covered by grass and small plants including Bunchberry Dogwood (Cornus canadensis), Woodnymph (Moneses uniflora), Strawberry (Fragaria), Bog-orchid (Habenaria sp.), Queencup Beadlily (Clintonia sp.), Twin Flower (Linnaea borealis), Snowberry (Symphoricarpos alba), & Huckleberry (Vaccinium sp.). Small, slow moving streams

Journal

R. E. Johnson
1966

West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.)

July 4

Flow through the forest making ideal habitat for the waterthrush. Four (3 adults & 1 young) were collected. MacGillivray Warbler, Wilson Warbler, Audubon Warbler, Oregon Junco, & Winter Wren were common and one each of the 1st 3 were collected. The MacGillivray Warbler had 2 insects in its bill (both alive), one a hover fly and the other an orthoptera.

Rain & cloudy dark skies continued for the 3rd day straight but today was a little warmer. The mosquitos disappeared with the cold yesterday, but returned today.

Ward caught us a load of fish tonight (for the 3rd straight day). They run between 6 & 9 inches in the river near camp. Apparently every small hole has several. So far Ward & Conrad have taken about 55 fish in 3 days.

July 5

Ames, Moore, & I drove up the Winkum Creek Rd through a large cutover area and finally to the Hawkins Lakes. I collected a Fox Sparrow and two Mountain Chickadees in the cutover area (located 2.5 miles E. of Northwest Pk., 5800 ft.). A chickadee nest was located 40 ft up in a snag at the edge of the cut. The nest was East facing. Both adults were seen to enter on different occasions, one was collected.

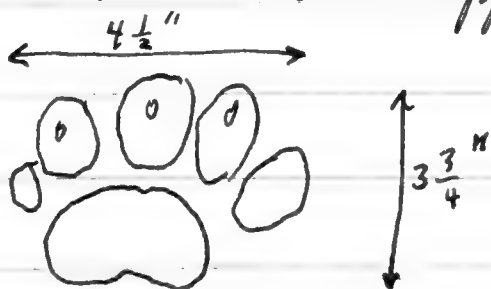
A Townsend Solitaire was collected high on the ^{in the cirque} ledges, above the second Hawkins Lake (3 lakes). The cliffs & ledges

Journal

R.E. Johnson
1966West Fork Yaak River, 5000ft, Lincoln Co., Montana (cont.)

July 5 were checked for signs of Ptarmigan, Pipits, & Rosy Finches & nothing to indicate their presence was found. There are trees above & below the cliffs & a few sizeable trees protrude from the cliffs. Considerable snow lies below & some ice remains on the lake. The ledges look typical of Ptarmigan habitat but may be too dry over much of their length. Vegetation on the ledges include Alpine Fir, Larch, Saxifrage, Moss, Buttercup, White Heathers (Cassiope & Phyllodoce).

On returning to the truck I learned that Moore & Ames had seen 3 Wolverines not far from the parking area & had cornered one in a den (?) in a boulder slide. One of the 3 had been carrying a Hoary Marmot carcass. I remained at the 'den' while Moore & Ames drove to camp to obtain traps & find Ward. On their return we set up traps below the rockslide. The wolverine had come out of the hole ($\frac{2}{3}$ exposed) and spotted me and returned to the hole. It did not appear again during the time we were present. A low growl could be heard from the hole when anyone approached. Wolverine tracks left in the snow appeared as below:



R.E. Johnson
1966

Journal

West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.)

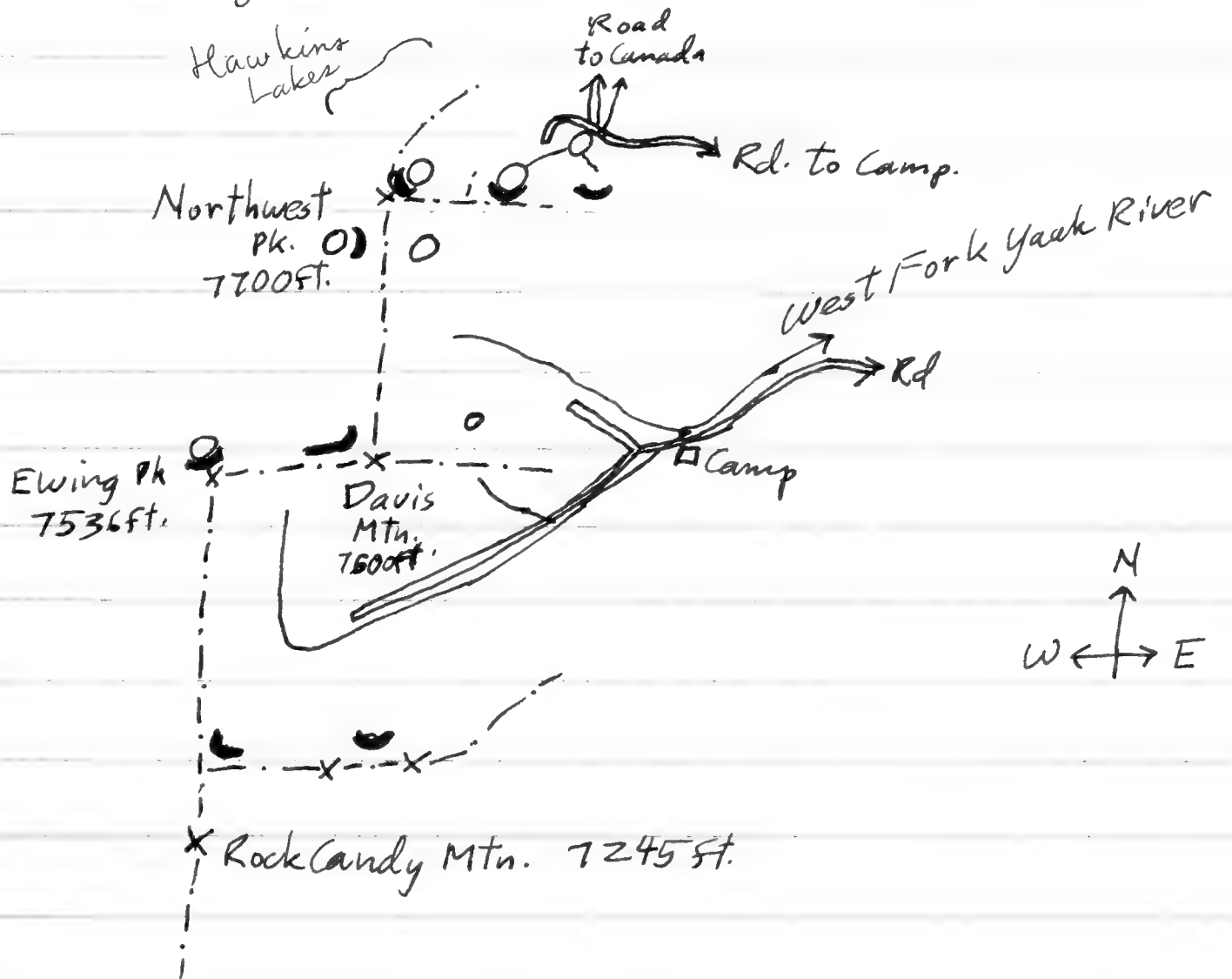
July 6

We all drove to Hawkins Lakes, passing 3 Black Bear in the cutover area along the way. Our Wolverine traps were empty. We set 2 more (ie. 1 setting, 2 traps). I hiked to the upper lake and around the NW side climbing the ridge and going south to the top of Northwest Pk (7200 ft.). The ridge has some turf (Glacier Lily, Juncus, etc) but no birds utilizing it for nesting. The peak is a huge boulder pile (size approx. 1-2 ft diameter) with an old lookout bldg. on top. A fringe of trees grows along the north edge of the peak above the cirque occupied by the upper lake. A Raven flew over & an Oregon Junco was seen in the trees, otherwise no birds were seen on top. A large cirque on the NW side of Davis Mtn. can be seen and its cliffs appear to be the best Rosy Finch habitat yet seen. Perhaps I can make a trip there tomorrow. I returned to the truck by taking the trail from the peak toward the east to a spring just below the boulders and then following a rocky timbered ridge down between the upper and middle Hawkins Lakes. I collected a Townsend Solitaire high on this ridge & ~~I~~ heard a Varied Thrush (♀) making distress calls, possibly indicating a nearby nest.

Journal

R.E. Johnson
1966

West Fork Yaak River, 5000 ft, Lincoln Co., Montana (cont.)



- = camp
- x = peak
- - - = ridge
- o = lake
- = = road
- u = cliffs (possible rosy finch nest site)

July 7

The weather was unbelievably clear & hot, almost a shock after the continuous bad weather. I hiked up the Davis Creek Rd a short ways, collecting a Steller Jay in route and then on up to the east ridge of Davis Mtn. An ^{adult} Mtn Chickadee was collected at the nest (nest 3 ft up in knothole in live alpine larch tree. Nest east facing). In the lower

Journal

R.E. Johnson
1966

July 7 West Fork Yellowstone River, 5000ft., Lincoln Co., Montana (cont.)
willow areas & timber Hermit Thrushes & Wilson's Warblers sang. Higher on the ridge Townsend Solitaires were very common. Chipping Sparrows, Clark Nutcrackers, Mtn. Bluebirds, Pine Siskins, a Rock Wren, Red-shafted Flicker, Audubon Warblers, a Robin, and Oregon Juncos were seen along the ridge at various points. A White-crowned Sparrow & Clark's Nutcracker were collected. The ridge top is barren & rocky on its eastern end. Higher (west) it has snow patches, stunted trees, a patch of dead snags, and finally scrubby trees leading to (& on) the summit of Davis Mtn. The south slope of the ridge is dry, rocky, & fairly open (low bushes, many dead snags); the north slope has large snow patches, a few narrow meadow ledges (some dry, some wet), and some open forests. Trees are mostly White-barked Pine, Alpine Larch, & Engelman Spruce. Turf vegetation includes Glacier Lily, Juncus, Heathers, & Blueberry (dwarf).

The top of Davis Mtn is covered with stunted trees. The large cirque on its NW slope (mentioned in yesterday's notes) does not appear to have any rosy finches. The cliffs at the highest I've seen in this area. There is less snow than I had expected at the bottom (still a considerable amount) perhaps because of the low elevation of the base.

Journal

R.E. Johnson
1966

West Fork Yellowstone River, 5000 ft., Lincoln Co., Montana (cont.).

July 7

I descended the south slope of Davis Mtn. & finished exploring the meadows & ledges between Davis Mtn. & Ewing Pk that I first looked at on June 27. These meadows, ledges, & snow fields are of the type that one would expect to find Ptarmigan in, but are south facing & thus dry up very rapidly after snow melt. There is no area of similar size & elevation in these mountains which is located on a north slope of a mountain. The apparent absence of Ptarmigan in these mountains is probably due to the rapid drying of the habitat, high temps. (higher than at similar elevations in Glacier Nat. Park, for example), & perhaps total absence of suitable habitat by the end of the season. At this time small patches of habitat exist, separated by large gaps of dry habitat or barren areas.

Horned Larks are also absent since there is none of the high alpine pavement of the type they prefer. Ridges & Mtns are either ~~large~~ boulders, trees, or snow. Little soil exists & the small turf patches existing are more like pipit habitat than lark habitat.

Pipits do not occur in these mountains even though there are patches of the appropriate habitat. The amount of habitat may be too small & too widely spaced. Also it may be too dry before the end of breeding.

Grouse scat is fairly common at high altitudes, but this is probably Blue Grouse and

Journal

R.E. Johnson
1966

July 7

West Fork Yaak River, 5600ft., Lincoln Co, Montana.

not Ptarmigan. The scat is all old, no fresh scat has been seen & neither species has been seen.

No goat or sheep trails have been seen & no bedding places.

Oregon Juncos & White-crowned Sparrows, which commonly nest on the alpine turf in other areas, do not do so in these mountains, though they do occur in the adjacent trees.

In summary regarding the "alpine" turf, no species of bird appears to be utilizing it for nesting. Causes appear to be the ^①limit area of the turf & its ^②discontinuity and the ^③early drying up of the habitat.

Rosy Finches do not occur here. There are abundant cliffs, extensive snow patches, ~~but~~ both of which are normal components of rosy finch habitat. While the amount of habitat is small compared to many ranges in which they do occur, it is much larger than the habitat in the Little Belt Mtns, Montana where L.t. atrata & L.t. tephrocotis appear to interbreed. Since the elevation is low, the areas below the cliffs (nest sites) are mostly well below alpine conditions. Trees usually occur above & below the cliffs in considerable numbers, as well as on the cliffs. Such conditions may not trigger a nesting response.

Journal

R.E. Johnson
1966

West Fork Yaak River, 5000 ft., Lincoln Co., Montana (cont.).

July 8

Ward, Dave Conard, & I drove to Hawkins Lakes to check the Wolverine traps (all empty), then Ward went fishing in the middle lake using lures (no bites), Dave went after Conys, and I swung east into a cirque (1st cirque east of the middle lake. It drains into the lower lake). The cirque was filled with boulders, with timber down slope and cliffs above. Snow patches occur at the base of the cliffs and also fringe the top. Also a good stand of timber occurs at the top. I collected 3 Pine Siskins in a larch tree at the lower edge of the boulders. Also heard in this forest were: Chipping Sparrow, Golden-crowned Kinglet, Audubon Warbler, & Ruby-crowned Kinglet. A Chipping Sparrow was collected from a small clump of Larch trees at the base of the cliffs. Its song was an ascending (or sometimes undulating) trill rather than the usual constant trill. These birds are listed ~~in the catalogue~~ as "1 mile E of Northwest PK, 7000 ft." and were prepared by W.C. Russell.

I then hiked to the ridge (south up the cliffs) & west to a point above the middle lake. Here I collected a Varied Thrush, Clarke Nutcracker, & a Warbler (sp?). A Hermit Thrush & Rufous Hummingbird (♂) were also seen.

R.E. Johnson
1966

Journal

July 9

West Fork Yaak River, 5000 ft, Lincoln Co., Montana (cont.)

Ames, Moore, & I drove down to Pete Creek and collected at about 4000 ft. They moved up slope and saw Black-headed Grosbeaks & Orange-crowned Warblers. I stayed along the stream bottom which is filled with a tall mixed forest of Western Red Cedar, Douglas Fir, Grand Fir, Engelman Spruce, Western Hemlock, & Western White Pine. Understory included alder, Thimbleberry, gooseberry, Fairy bells, & Ferns. I collected 3 adult Yellow-bellied Sapsuckers feeding young in a streamside snag. The hole was 40 ft. up & was West facing. Two of the adults were females and one was a male. Two Empidonax flycatchers were collected from the tops of streamside conifers. They moved back & forth between tree tops, usually remaining over 50 ft above the ground (or water). Each gave the typical Hammond "slurp" note periodically. Russell prepared one & I, the other. They behaved similarly to those I collected at Spar Lake (prepared by Russell). A ♀ Rufous Hummingbird dove at me in a small streamside clearing. Russell prepared the specimen. I also collected a Mountain Chickadee, a Golden-crowned Kinglet, two Red-breasted Nuthatches, and 2 Frogs in this habitat.

After 9 P.M., Dave Conard spotted a bat over the road near camp and we all went out after bats, the first we had seen. Two high flying Silver-haired Bats & one low flying Brown Bat were shot. We're not sure who

R.E. Johnson
1966

Journal

West Fork Yaak River, 5000 FT., Lincoln Co., Montana (cont.)
brought them down, but Dave fired the most shots & skinned the first two. The latter was not found until the next day & was pickled.

July 10

Ward drove me to the trail to Northwest Pk. (located along the top of the logged area on the Winkum Creek Road but several miles before arriving at Hawkins Lakes) and I hiked 2 miles to Northwest Pk, then hiked the along the ridge top ^{south} ~~north~~ to Davis ~~pk~~ Mtn, Ewing Pk, & Rock Candy Mtn; then east along the ridge that forms the southern boundary of the West Fork Yaak River Drainage to a point above camp, where I descended to the valley floor. I did no collecting. The trip started at 7:45 AM and ended at 4:10 PM.

In the logged area (snags, downed logs, shrubs & open ~~thicket~~ ground) I found an Oregon Junco nest with 5 eggs under a clump of grass, facing SE, but not at all visible from any direction without parting the grass. An adult was flushed from the nest.

Fox Sparrows were singing from perches in a clump of *Menziesia* near the edge of the logged area. A Rufous Hummingbird was seen in the same area. A Pine Grosbeak (♀) gave short call notes while feeding ~~in~~ on fir branches 30 FT up in ^{live} a tree in the cut area.

Where the trail reaches the ridge top above the

R. E. Johnson
1966

Journal

West Fork Yak River, 5000ft., Lincoln Co., Montana (cont.)

lower Hawkins Lake (forested with intervening rock slides) I heard Clark Nutcrackers & saw an Audubon Warbler feeding midway up a small larch tree on an edge (forest-boulder) & singing occasional phrases.

A spring is located to the left (south) of the trail in the last clump of trees ($\frac{1}{2}$ dozen larch trees) below the top.

I listened and watched for Rosy Finches above each cirque along my path, but did not have time to descend far into any of them. No evidence of finches was found.

I had never been on the ridge between Northwest Pk and Davis Mtn but it is similar to the one between Ewing & Rock Candy Mtns. Small trees ascend its west slopes, the top is meadow, rock, or snow, and the east slope is talus &/or meadow. Meadows consist of White Heather (both genera), dwarf huckleberry, ~~Butter~~ Pedicularis, Juncus, Glacier Lily, grass, Indian Paint Brush, & Lomatium. Oregon Juncos, Chipping Sparrows, & Audubons Warblers were seen along the edges.

One set of Wolverine Tracks Followed the ridge between Northwest Pk & Davis Mtn, rarely missing walking on every snow patch along the way. At Davis Mtn the tracks headed east

Journal

R. E. Johnson
1966

July 10

West Fork Yaak River, 5000 ft., Lincoln Co., Montana. (cont.)
around the mtn. instead of up over the last rock slides to the top. I followed this latter route. The ^{wolverine} route was straight with no side trips to explore or hunt. Occasionally its tracks indicated that it turned to look down the east slope but it never deviated from its straight path.

Townsend Solitaires & Hermit Thrushes were seen on the forested lower north slopes of Davis Mtn.

Winter runways of Microtus &/or Thomomys were very common on the ridge between Ewing Pk and Rock Candy Mtn, but no fresh activity was noted.

A Western Meadowlark was seen on the north slope of Rock Candy Mtn.

The ridge extending east from Rock Candy Mtn (forms south boundary of West Fork Yaak River Drainage) has been burnt over in the recent past and is covered with dead snags. Extensive meadows ^{with ponds} occur on flat ledges ^{with ponds} on either side of its west end. Red Heather & Speedwell were found nowhere else in these mountains. Several White-tailed Deer were seen at 7000 ft (all bucks).

Several small ($1\frac{1}{2}$ " diameter) patches of yellow were seen in the snow. Two of these centered on small Juncus plants. Close examination indicates

Journal

R.E. Johnson
1966

West Fork Yaak River, 5000ft., Lincoln Co., Montana (cont.)
that these are small yellow soft bodied larvae(?) which form a layer continuous from the top to the bottom of the snow.

A Varied Thrush nest was located 12 ft. up in a 15 ft tree and contained 3 blue(turquoise) eggs with purple spots. An adult flew off calling & her mate and several other species joined here in falling from ~~the~~ nearby trees. These "helpers" included a Pine Grosbeak, 2 Chipping Sparrows, a Vireo (sp?), a Hermit Thrush, & 2 Robins.

Note: Townsend Solitaires are more common in these mountains than anywhere that I have been. They occur at the highest locations at which some trees occur. Mating flights & song were often observed.

July 11

We drove from our camp at Yaak to Bonners Ferry, Spokane, Pasco, Bend (Oregon), and a little further south, camping on private lumber company land (lodgepole & ponderosa pine with sage under story — wide spaced trees). Nighthawks, Empidonax Flycatchers, & Hermit Thrushes could be heard.

July 12.

We drove on to Berkeley via Klamath Falls & Redding.

Johnson, R.E.,

1967

Journal

calif

Winter - Spring 1967

Journal

R.E. Johnson
1967Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif.

Jan. 11

Left my apartment at 3PM and drove to Tilden Park via Spruce St. and Canyon Drive, parking the car south of the tennis courts across from the Pony Ride area (This area is referred to as "Playfield" by a Tilden Park sign & by Zoo 113 & on 107 Field Classes). The purpose of this trip was to check the accuracy of a Zoo 107A mimeo map handout and to determine which birds we should expect to see on field trips I will lead on Fri. & Sat. of this week (Jan. 13 & 14). The map proved misleading at the corner of Spruce, Grizzly Peak, and Canyon Drive, where one intersecting street was omitted from the map.

I arrived at "Playfield" at approx. 3:30 PM after scouting the general area by car first. The sky was overcast, the temp. cool, and there was no sun.

Twenty one bird species were identified by sound or sight between 3:30 PM and 5:20 PM (dusk), and these were found in the following habitats:

- ① Thick brushy slope of Coyote Bush (Baccharis pilularis), Poison Hemlock (Conium maculatum), Scrub Oak (Quercus dumosa), Thistle (Cirsium sp.), and Rubus sp. Many birds heard scratching in leaves but few were seen or heard. A Bewick's Wren was seen and a Brown Towhee and Wren Tit were heard. A ♂ Anna's Hummingbird

Journal

R.E. Johnson
1967

Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif. (cont.)

Jan. 11

"buzzed" over and landed on top of a tall (15 ft.) Scrub Oak bush which overlooks the remainder of the ^{brushy} hillside.

Approx. 20 min. later he began to sing from that perch, the song continued virtually uninterrupted for several minutes.

② Coast Live Oak (Quercus agrifolia). A number of large (40 ft.) oaks stand adjacent the creek and a mixed flock of small birds moved through the oaks. These included Plain Titmouse, ^{Common} Bushtit, & Chestnut-backed Chickadee. One Song Sparrow and one "Hutton Vireo - R.C. Kinglet type" (not seen clearly) were also seen. The mixed flock responded to the "pish" call.

③ Eucalyptus grove over picnic area.

Red-shafted Flicker

Oregon Junco (calls from high in tree)

Western Robin - many

④ Yellow Willow (Salix lasiandra) and undergrowth near Wildcat Creek on trail & adjacent road to Jewel Lake.

Scrub Jay

Song Sparrow - one sings typical "sweet, sweet ~~~" song.

Fox Sparrow - creek's edge

Brown Towhee

Golden Crowned Sparrow } in leaf litter

Robin - many chirping from every tree & bush. Hundreds present.

Journal

R.E. Johnson
1967

Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif. (cont.)

Jan. 11.

⑤ Jewel Lake & adjacent cattails, etc.

Canvasback - 4

Coot - 10+

Mallard - 10+

Canada Goose - 1

Bufflehead - 1 ♀

Red-winged Blackbird - many heard calling, none seen.

⑥ Other.

a Mourning Dove was heard calling in the distance at dusk.

R.E. Johnson
1967

Journal

61

Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif.

Jan. 12

Drove via same route as Jan. 11, arriving at 7:50 AM. The ground was wet from a light rain during the night, but the sky was clear and the sun came out.

Several Brown Towhees feed in the open grass-forb area adjacent to the Brush patch 1st referred to on Jan. 11. Wren-tits could be heard singing in the distance.

A "pish" call seemed to attract Plain Titmice, R. Crowned Kinglets, Bush-tits, Scrub Jays, & Steller's Jays from ~~a~~ Live Oak-brush slope. Titmice were subsequently seen in Oaks, Calif. Laurel, & Eucalyptus. Male Anna's Hummingbirds were seen over brushy areas and one dived on a Hutton's Vireo.

Ruby-crowned Kinglets were seen feeding in the foliage of Douglas Fir and Dogwood. Immature and adult White-crowned Sparrows feed along the road and in open fields with Brown Towhees. Both species fly up to bushes when disturbed. A song sparrow move up from beneath or within bushes to join the W.C. Sparrows & Towhees in the bush tops at about the time the sun hit these bushes. Later a song sparrow was heard singing.

Steller's Jays began their incessant chatter of calls from high in the Eucalyptus trees & also from oaks as soon as the sun came out. Several Oregon Juncos were seen in the tops of bushes.

Journal

R.E. Johnson
1967

Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif.

Jan 12.

One Ruby-crowned Kinglet was very responsive to my Pygmy Owl call & flew down from a Douglas Fir tree & twice circled over my head. When feeding undisturbed in the tree foliage, it sometimes hovers in the air while feeding. It often makes a coarse tut-tut-tut-tut note. Chestnut-backed Chickadees feed in good numbers high in Eucalyptus (& also, ^{+ bay} oak) trees. Short series of notes were sung, probably not full song. California Quail were seen feeding on freshly spaded ground. Two Red-shafted Flickers were seen in Eucalyptus Trees. Yellow-bellied Sapsuckers were noted twice, each time pecking at trunks of large Eucalyptus trees. Several lateral rows of holes were seen, leftovers of previous workings. A Mourning Dove was heard in the distance. A group of Fox Sparrows, Brown & Spotted Towhees, Oregon Juncos, White-crowned & Song Sparrows were seen feeding on the ground together. Fox Sparrows feed in a manner similar to Brown Towhees, i.e. scratch in the litter & dirt with both feet at the same time. One Fox Sparrow chirped from the top of a thistle stalk in a brush patch (the first sign of song in this species). Bewick's Wrens were heard in full song from ^{within} Coyote Bush thickets (song vaguely resembles Song Sparrow). Canvasbacks, Coots, Mallards, a Canada Goose, & a pair of Buffleheads were on Jewel Lake.

Journal

R.E. Johnson
1967

Jan. 13

Strawberry Canyon, Alameda Co., Calif.

Zoo 107A (Natural History of Vertebrates) met in Strawberry Canyon at the parking lot West of the tennis courts at 8 AM. Weather was cool & clear.

Our party of 12 hiked up the south slope of the canyon to the top & then followed paved residential streets East to pine trees. The south slope (ie. North facing) is covered with Canyon Live Oak, California Bay, Poison Oak, California Blackberry and others. Trip ended at 12 noon.

Species list:

White-throated Swift	W.C. Sparrow
Red-shafted Flicker	G.G. Sparrow
Red-breasted Nuthatch	Song Sparrow
Wren Tit - singing	
Chestnut-backed Chickadee	
Plain Tit mouse	
Bush-tit - flocks	
Steller's Jay - common	
Scrub Jay	
Robin	
Bewick's Wren - many singing.	
Hermit Thrush	
Western Mockingbird	
House Finch	
Rufous-sided Towhee	20 species
Brown Towhee - fighting & associated calls noted	
Oregon Junco	

Journal

R.E. Johnson
1967Jan. 14 Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif.

Zoo 107A Field Trip to Tilden Park. 13 individuals in my field group. Clear, cool, and windy on arrival at 8AM, warming with wind dying down during day.

The wind may have been responsible for the small number of birds seen early in the morning as compared to Jan 11 & 12 when the same route was followed (Tennis courts to Jewel Lake).

The species seen were as follows:

White-crowned Sparrow

Buttfehead

Brown Towhee

Ruddy Duck

Chestnut-backed Chickadee

Canada Goose

Plain Titmouse

Pine Siskin

Cooper Hawk

Glaucous^{Gull}-winged

Calif. Quail

Anna Hummer

Rufous-sided Towhee

Scrub Jay

Wren-tit

Hermit Thrush

Varied Thrush

Ruby-crowned Kinglet

Oregon Junco

Red-tailed Hawk

Red-shafted Flicker

Yellow-bellied Sapsucker

Black Phoebe

Mallard

Coot

23 species

Canvas back

Journal

R. E. Johnson
1967

Jan. ²⁰~~19~~

Wildcat Canyon, Alameda Co., California - cool, foggy, still.

Arrived at "Playfield" at 8:15 AM. Foggy.

Chestnut-backed Chickadee

Ruby-crowned Kinglet

Steller's Jay

Wren-tit

Anna's Hummingbird

Golden-crowned Sparrow

White-crowned Sparrow

Robin

Song Sparrow

Brown Towhee

Hermit Thrush

Plain Titmouse

Red-shafted Flicker

Varied Thrush

Rufous-sided Towhee

Brown Creeper

Bewick's Wren

Bush-tit

Returned at 10:30 AM

Journal

R.E. Johnson
1967

Jan. 20²¹

Wildcat Canyon, Alameda Co., California

Cool, Rainy. Zoo 107A class met and took short bird walk from "Playfield" to Jewel Lake & back.

Few birds were observed due to rain.

Brown Towhee

Glaucous-winged Gull - many overhead

Robin

Song Sparrow

Wren-tit

White-crowned Sparrow

Mallard

Bufflehead - ♀

Canada Goose

Canvasback

Anna's Hummingbird

Coot

Steller's Jay

Yellow-bellied Sapsucker

Rain continued throughout trip (8-10 AM).

R. E. Johnson
1967

Journal

Jan. 27 Wildcat Canyon, Tilden Regional Park, Alameda Co., Calif.

Cool, cloudy but clearing through morning, wet from previous night's rain. Zoo 107A Field trip. 8-12 AM.

Chestnut-backed Chickadee

Mallard

Bush-tit

Canada Goose

Plain Titmouse

Coot

Wren-tit

Pine Siskin

Bewick Wren

Song Sparrow

White-crowned Sparrow

Brown Towhee

Ruby-crowned Kinglet

Red-shafted Flicker

Scrub Jay

Oregon Junco

Hermit Thrush

Golden-crowned Sparrow

Robin

Anna's Hummingbird

Glaucous-winged Gull

Yellow-bellied Sapsucker

Red-tailed Hawk

Steller's Jay

Fox Sparrow

Black Phoebe

Ruddy Duck

Canvas back

R.E. Johnson
1967

Journal

Jan. 28. Strawberry Canyon, Alameda Co., Calif.

Raining alternately hard and light. Zoo 107A
Field trip. Walked From Tennis courts up
canyon to vicinity of Botanic Garden. 8-10 AM

Steller's Jay

Brown Towhee

W.C. Sparrow

Oregon Junco

Rufous-sided Towhee

Anna's Hummingbird

Song Sparrow

Chestnut-backed Chickadee

Lesser Goldfinch

House Finch

Cooper's Hawk?

Taricha granulosa

Berkeley Aquatic Park, Alameda Co., Calif.

Rain continues throughout morning. Several
Zoo 107A students drove to the park from
Strawberry Canyon to look at birds.

Snowy Egret

American Egret

Great-blue Heron

Arctic Loon

Pied-billed Grebe

Red-breasted Merganser

Journal

R. E. Johnson
1967

Jan. 28

Berkeley Aquatic Park, Alameda Co., Calif. (cont.)

Redhead

Ruddy Duck

Bufflehead

Common Goldeneye

Lesser Scaup?

Coot

Killdeer

California Gull

Willet

Forster's Tern

Journal

R. E. Johnson
1967

Feb. 3

Berkeley Aquatic Park, Alameda Co., Calif.

Clear early but growing hazy. Warm & still but becoming cooler with a slight breeze.

Noisy due to Freeway traffic. 8-12 AM.

Horned Grebe - several diving near S. end of lake

Common Goldeneye ♀ & ♂; ^{♂'s fewer, mid-late} many ♀'s scattered.

American Avocet - island

Bufflehead - ♂'s & ♀'s

Canvasback - ♂'s & ♀'s 10±

Killdeer -

Coot - 20±

Redhead - 10± ♂'s & ♀'s

California Gull several } on mud island

Western Gull - 1

Ring-billed Gull - several

Bonaparte Gull - common

Snowy Egret - 25±

American Egret - 2

Scamp sp? - several

Double-crested Cormorant - 10±, ^{dive in sequence.} yellow patch visible

Arctic Loon - one near shore

Dunlin - 30± mixed with more numerous "peeps"

Ruddy Duck - 15±

Red-breasted Merganser - ♂'s, few

Western Meadowlark - several

Mourning Dove - several

"Peeps"

Pied-billed Grebe

R. E. Johnson
1967

Journal

Feb. 4

Berkeley Aquatic Park, Alameda Co., Calif.

warm, hazy, and still.

Motor boats disturbed birds at 10 AM.

Buddy Duck

Snowy Egret

Common Goldeneye

Bufflehead

Coot

American Avocet

Greater Yellow-legs

Killdeer

Willet

Bonaparte Gull

Ring-billed Gull

Least Sandpiper

Double-crested Cormorant

Loon sp?

Common Egret

Snowy Egret

Red-breasted Merganser

Brown Towhee

Mourning Dove

Bush-tit

House Finch

Glaucous-winged Gull

Western Meadowlark

Horned Grebe

Pied-billed Grebe

Song Sparrow

Scaup?

R.E. Johnson
1967

Journal

Feb. 5 Berkeley Marina, Alameda Co., California

clear, sunny, breeze from SW. 4:40 PM - 6:00 PM

Mudflat exposed near jct of Marina Rd and freeway onramps. Mudflats covered with gulls (mostly along shallow water channels through mud) and sandpipers. About 40 ducks (Canvas backs & Scaup - both ♂'s & ♀'s) float in shallow water 15 ft out from shore.

They are in a tight group and each is apparently feeding by submerging its head and neck only (not diving) well beneath the water for 2 second intervals (applies to both species). Birds present on mudflats:

Western Gull

Glaucous-winged Gull

Ring-billed Gull

Sanderling } head constantly jumping in & out as it walks
Willet } scattered singly over mudflat

Black-bellied Plover - winter plumage

Mew Gull

Killdeer - two

Dunlin - small group of 15 ±
feeding together

Godwit - too far away to identify with certainty.

The Ring-billed Gull searched the mudflats & picked up objects, including clam shells. Many were bathing in the narrow channel in the mudflats, by standing in the water & submerging their heads & then

Journal

R. E. Johnson
1967

Feb. 5.

Berkeley Marina, Alameda Co., Calif. (cont.)

extending them upright while shaking their heads, shaking the water ~~over~~ off. This was repeated over and over with great vigor.

Western Gulls were largely idle, but occasionally one would approach a willet and frighten it off when the willet had in having some difficulty extracting an object from the mud. This appeared to be an attempt at pirating but the willets appeared to get away with the goods in each case observed.

Willets often poked their bills into the mud clear up to their foreheads + appeared to be struggling to reach a deeper object or to remove a big one. The Black-bellied Plover appeared to pick objects up from the surface and not to probe at all.

Further out from shore was a large²⁰⁰⁺ gathering of ducks, again mostly Canvasbacks and a few Scaup. Along one margin was a group (20) of Ruddy Ducks. One Western Grebe floated alone 40 ft. off shore.

A group of 20 coots, another of 4 Western Grebes, and a single Loon (sp?) swam in the marina dock area at dusk.

Journal

R.E. Johnson
1967

Feb. 10

Playfield to Jewel Lake area, Tilden Regional Park, Alameda Co., California. Cool, foggy morning with south wind becoming warm & sunny. Walked Wildcat Creek from playfield toward Jewel Lake and up to east through Eucalyptus, Bay, & Oak to Laurel Creek. Then west to Jewel Lake dirt road and north to ponds near Jewel Lake.

Amphibian trip: Calif. Slender Salamander
Ensatina - one under ^{Bay tree} log near
Taricha torosa - 15 in Laurel ^(only 1 ♀) creek. Pair copulating.
Taricha granulosa - 14 ♂, 2 ♀ in ponds in open grass field. Also 4 ♂ Calif Newt present, plus ~~one~~ ^{two} egg masses with larvae hatched.

Arboreal Salamander - one ~~in~~ ^{Quercus agrifolia} ~~rotten tree branch 15 ft up~~ ~~& others under rocks~~ under log under ~~Bay~~ Oak trees.

Oregon Junco } 1st songs of season.
Hutton Vireo }

Journal

R.E. Johnson
1967

Feb. 11

Lake Anza, Tilden Regional Park, Alameda Co., Calif.

Clear, sunny, cool breeze from south. Becoming overcast.

Walked from parking area south of merry-go-round east to Wildcat Creek & then north on creek for 200 yards.

Calif. Slender Salamander - under rocks & logs under Eucalyptus, Oak, & Bay.

Calif. Newt - 10+, mostly ♂'s in Wildcat creek, mostly in pools of slow water.

Two pairs copulating.

Arboreal Salamander - one in rotten limb of Quercus agrifolia 15 ft above ground & 20 ft from creek. Others under rocks & logs up to 50 ft. from creek. One had bunch of eggs hanging from rock (6+ eggs in clump). Location under oaks & bay trees, one under Eucalyptus.

Ensatina eschscholtzii xanthoptica -

4, 2 quite small (less than 2 inches).

Secrete white glue from tail & head top.

Under logs & rocks under bay trees.

Hutton's Vireo singing

Chestnut-backed Chickadee

Journal

R. E. Johnson
1967

Feb. 20

Horicon National Wildlife Refuge, Dodge Co., Wisconsin

Clear, cold ($20-30^{\circ}\text{F}$), $\frac{1}{2}$ - 2 ft. of snow.

Drove to refuge from Milwaukee via US 16 east of Milwaukee, then Wisc. 26 & 33. Explored dirt roads along east side of refuge and visited headquarters. Gloria & Ruth Sharpe were along on the trip.

No water visible (apparently frozen & snow covered) and no water birds present. Canada Geese migrate through in large numbers and spend the winter in Southern Illinois. Snowy Owls are said to be present in winter but we did not see any.

American Rough-legged Hawk - several pair seen circling over (high) fields.

Red-tailed Hawk - a pair seen circling over fields. Very light phase.

Horned Lark - Flocks of 20-30 common along roadsides in open grassland. Most common bird seen.

Slate-colored Junco - small ($10 \pm$) flocks seen feeding on ground near trees.

Cardinal - singles seen here & there in refuge, perched in leafless trees.

Starling

White-crowned Sparrow

English Sparrow

White-breasted Nuthatch; Western Crow

Journal

R.E. Johnson
1967

Feb. 23.

Tilden Regional Park, Alameda Co., Calif.

Warm, clear, still. "Playfield" area.

Robins - on grass

Chestnut-backed Chickadee - several in Doug Fir.

Wren-tit - 3 in Doug Fir & adjacent oak. One singing.

Scrub Jay - perched high in Fir top.

Brown Creeper - crawls up Ponderosa Pine & Coast live Oak. Song: [— -- — —, -- — —]

Bush-tit - tops of coyote bush.

Ruby-crowned Kinglet - crude song.

Anna's Hummer

Downy Woodpecker - drums on dead Eucalyptus limb 75 ft. up. Two ♂'s & a ♀ in oak lower down.

Brown Towhee

Stellar Jay

Bewick Wren - buzz note as it climbs to top of 3 ft leafless bush.

Song Sparrow - feed & hop beneath ^{leaf} canopy of large coast live oak.

Spotted Towhee

Plain Titmouse

Oregon Junco - in oak & Eucalyptus trees, feeding

Hermit Thrush - scratch in leaves in brush like

Brown Towhee

Lesser Goldfinch - drink from creek. Many.

Mourning Doves - several feed under Eucalyptus

Journal

R.E. Johnson
1967Feb. 23. Tilden Regional Park, Alameda Co., Calif. (cont.)^{on ground}
trees, with Juncos.· W.C. Sparrow - feed on green grass 1-5 ft. from
willow thicket border.

"Pish" call attracts R.C. Kinglet & Scrub Jays.

"Farm" area - very noisy with people. Birds
also more active.Mourning Dove } calls heard
Steller Jay
Calif. Quail }Song Sparrow - singing ♂; ♀ seen on
ground fluttering & begging (wings out, bill
open & out, etc.), ♂ follows her, running.

Red-Shafted Flicker.

Rufous Hummingbird

Mallard } Jewel Lake
Coot
Canada Goose
Ruddy Duck
Canvasback }

Journal

RE. Johnson
1967

Feb. 24 Joaquin Miller Regional Park, Alameda Co., Calif. Cool, slightly hazy, becoming cloudy. Birds very still, quiet, and hard to find. Zool 107A field trip. Forest composed of Coast Redwood, Madrone, Monterey Pine, Calif. Laurel, Coast Live Oak, Coulter Pine, Current, Coyote Bush, Alder, Olive & Acacia. Brush areas almost exclusively Coast Live Oak (small) & Coyote bush (dominant).

Stellar Jay

Chestnut-backed Chickadee

Oregon Junco - two songs -

Purple Finch - sing from ^{high} tree tops redwoodRobin - clusters of robins in low ₁ tree tops.

Varied Thrush

Red-shafted Flicker

Song Sparrow

Cooper Hawk

White-breasted Nuthatch - one bird

Red-breasted Nuthatch

Downy Woodpecker

Anna's Hummingbird } coyote bush areas.

Rufous Hummingbird }

California Thrasher }

Wren-tit }

Mourning Dove

R.E. Johnson
1967

Journal

Feb. 25

Joaquin Miller Regional Park, Alameda Co., Calif.

Cool, still, ground wet from previous night's rain.

Cloudy. Birds mostly high in trees. Same habitat as Feb. 24. Zoo 107A Field Trip.

Red-breasted Nuthatch

Chestnut-backed Chickadee

Bush-tit

Townsend Warbler

Robin

Oregon Junco

Brown Towhee

Rufous-sided Towhee

Mourning Dove

Purple Finch

Allen's Hummingbird - feeds on current flowers.

Stellar Jay

Wren-tit

Anna's Hummer

Red-tailed Hawk

California Thrasher

Bewick Wren

Turkey Vulture

Red-shafted Flicker

Ruby-crowned Kinglet - one heard

Scrub Jay

Song Sparrow

Golden-crowned Sparrow

+ *Ensatina*, Arboreal Salamanders, & Calif. Slender Sal's

} in stands of
Coyote Bush (Archery area)

} under
redwood

Journal

R.E. Johnson
1967

March 3

Tilden Regional Park, Alameda Co., Calif.Partially cloudy, occasional warm sun, windy & cold. 8^{AM}-12:30 PM. Zoo 107A field trip.

Walked from "Playfield" (see Jan. 11) toward east via dirt road through coyote bush stands with intermittent grassy areas. Birds mostly under cover & few heard, even fewer seen.

Species noted:

California Quail - calls heard (several different locations; one, a canyon bottom)

Wren-tit - many singing

Goldfinch, American? in molt

Scrub Jay

Stellar Jay

Sparrow Hawk - sits on phone line over coyote bush - grassland.

Chestnut-backed Chickadee - in coyote bush

Red-breasted Nuthatch - heard

Bush-tit - in foliage layer of coast live oak, also in coyote bush.

Song Sparrow - heard

Turkey Vulture - circling over canyon

Golden-crowned Sparrow - one sitting low (near base) in ^{roadside} poison hemlock.

California Thrasher - several heard singing from adjacent locations.

Robin - Flock of 8 ±

Journal

R.E. Johnson
1967

March 3

Tilden Regional Park, Alameda Co., Calif. (cont.)

Species accounts written on a pair of foraging & hovering Red-tailed Hawks in the coyote bush area & on Ruby-crowned Kinglet, Plain Titmouse, & Red-bellied Sapsucker in Coast Live Oaks seen on the return trip, near Playfield in the creek bottom.

Anna Hummers seen in coyote bush area.
^{Pair} Small green birds seen (goldfinch size or less) in willows & oaks, fly rapidly back & forth (100 ft). Appear to have long slender beak compared to finches. Not identified.

Journal

R.E. Johnson
1967

March 4 Strawberry Canyon, Alameda Co., Calif.

Cool but growing warmer under clear sunny skies.

Hiked up south facing oak-grassland slope containing extensive brush (coast live oak, coyote brush, poison oak, elderberry) patches & pine stands (Monterey Pine & Italian Stone Pine). * Zoo 107A Field Trip.

Coast Live Oak stand was observed until 10:15 AM.

The following birds were seen in this location:

Purple Finch

Chestnut-backed Chickadee

Scrub Jay

Stellar Jay

Song Sparrow - singing

Townsend Warbler - in canopy of oak (no song)

Oregon Junco

Brown Towhee

Wren-tit (songs heard constantly)

x Bush-tit

x Downy Woodpecker

x Golden-crowned Sparrow

x Plain Titmouse

American Goldfinch

Coyotebrush, Poison Oak, Oak habitat

x Anna Hummingbird

Rufous-sided Towhee - song from top of dead brush, coyote brush, & low in dead Hemlock stalks.

Calif. Thrasher

Red-tailed Hawk - flies over brush

Journal

R.E. Johnson
1967

March 4

Strawberry Canyon, Alameda Co., Calif. (cont.)

Italian Stone Pine stand

x Red-breasted Nuthatch

Across canyon in denser vegetation of north slope.

Orange-crowned Warbler - heard often (1st of
season

Band-tailed Pigeon - small flock circles over
+ lands in tall cedar stand.

Vegetation is green & lush, but few flowers. Several
Calif. Poppies in bloom, some Poison Oak in full
bloom, and extensive new Chilacotho vines on
ground.

x = species accounts

Journal

R.E. Johnson
1967

March 19

Stinson Beach, Marin Co., California - waterway between sand & rock filled spit (separating bay from ocean) and mudflats exposed by low tide, located approx. 1 mile north of Stinson Beach. 1:30 - 6:00 PM. Increasing cloudiness throughout afternoon, remaining warm until 5:30 PM when it was completely overcast and a light breeze arose from over the ocean. By 5 PM the tide was in, covering the mud flats.

Groups of 20-30 Ruddy Ducks, often mixed with Horned and Eared Grebes (both in molt to breeding plumage), swam back & forth in the channel. Lesser numbers of Scaup in smaller groups were also on the water. A few Common goldeneye (1 ♂, several scattered ♀s) swam singly among other duck species. Buffleheads (mostly ♀s) were common among the grebes & ruddy ducks. A group of 50 Coots were on the muddy shore at the south end (dead end) of the channel. American Egrets waded along the edges of the channel in good numbers, with smaller #s of Snowy Egrets & Great Blue Herons (see species accounts of these three). There were no large flocks of shore birds on the mudflats, but there were individuals of the following species scattered over the flats: Willet, Killdeer, Western Gull, Marbled Godwit, Black-bellied Plover (1 breeding plumage to 10 winter plumage). An occasional Cormorant swam down the channel. After 5:30 PM I

Journal

R.E. Johnson
1967

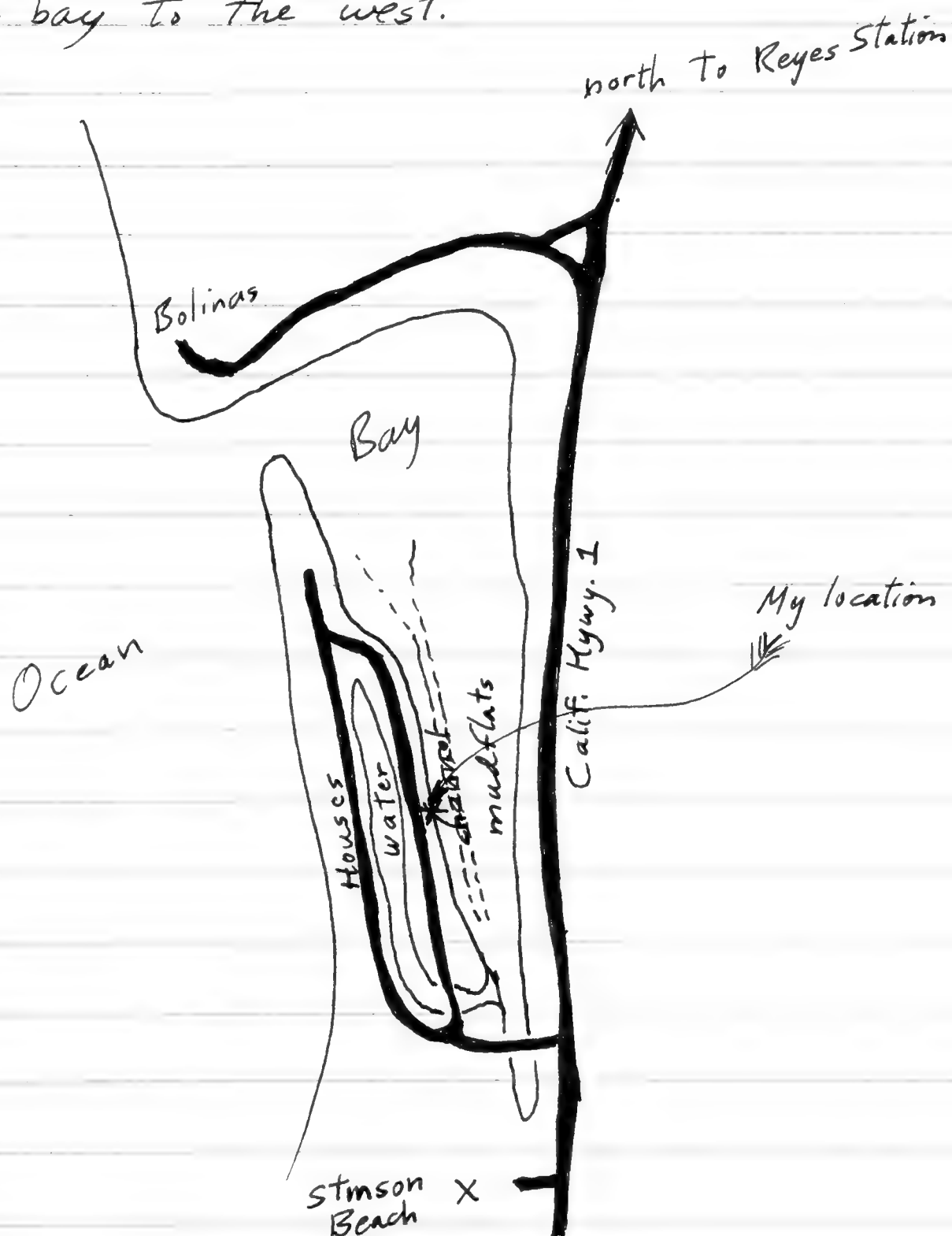
March 19

Stinson Beach, Marin Co., California (cont.)

walked further north toward deeper &/or wider portions of the mudbottomed bay and saw several additional species: Sanderlings (4), Snowy Plover (20), Long-billed Curlew (1), Mew Gulls (3), Surf Scoters (15+).

Land birds seen along a row of house on the ocean beach side of the spit:

House Finch, Allen Hummingbird, White-crowned Sparrow, Western Meadowlark. A Wren-tit was heard singing from the brushy hillside across the bay to the west.



Journal

R.E. Johnson
1967

April 8

Santa Barbara Museum of Natural History, Santa Barbara, Calif.

Attending 38th Annual Meeting of the Cooper Ornithological Society, April 6-9 based at the Museum. April 6 & 7 were rainy, but today is clearing. Attended all papers until 3:40 PM today when my "sit-down" was too numb to continue, thus a short bird walk along the creek SW of the museum. The following species were observed in the oak-sycamore, etc woodland adjacent the creek:

Scrub Jay

Western Flycatcher - Flycatcher within oak tree (short flights, i.e. 3 ft.). Had been heard singing in the tree tops in the morning (9 AM) but they are silent now.

Anna Hummingbird

Warbling Vireo - Forages in foliage layer of Quercus agrifolia. Sings while foraging.

Audubon Warbler

Western Mockingbird

Black-headed Grosbeak

Brown Towhee

Rufous-sided Towhee - a ♀ was watched following at 10 ft distance a ♂ for 10 minutes as the ♂ moved slowly (hopping & short flights) while feeding through the undergrowth beneath the trees. Later a ♂ sang (bzzzz; bzzzz; -) at a rate of 12+ "songs" per minute from the top of a 40 ft Live Oak.

Journal

R.E. Johnson
1967

April 8

Santa Barbara Museum of Natural History, Santa Barbara, Calif (cont.)

White-crowned Sparrow

Golden-crowned Sparrow

(see species accounts for Audubon Warbler & Scrub Jay)

April 8

Beach on Pacific Ocean, just south of Pier at Foot of State Street, Santa Barbara, California. 6:15-6:45 pm

Cool. Growing dark. Observed 2 feeding willets along the waterline (see species account).

Journal

R.E. Johnson
1967

April 9

Sespe Creek Condor Refuge, Ventura Co., California

Sunny, warm, occasional breeze, hazy scattered clouds. Started from Santa Barbara Museum of Natural History at 7AM, drove south & inland to Fillmore & then into the refuge via muddy & rutted dirt roads to the Condor observation area, where our caravan of cars stopped (then approx. 10AM). We watched vainly throughout the day, scrutinizing every soaring bird but no Condors were seen. Fossils were abundant in the area & I secured a number of these. The area is Chamise-chaparral covered and we turned up a number of birds while waiting. At a little after 2 PM we headed back toward civilization & spotted a Condor in route. Upon stopping we saw 2 additional ones & even witnessed copulation (see species accounts).

Species list:

Wren-tit

Bush-tit

Scrub Jay

Red-tailed Hawk - common

Marsh Hawk - 1

Golden Eagle - 1

Turkey Vulture - common

Condor - 3

White-throated Swift

Journal

R.E. Johnson
1967

April 9

Sespe Creek Condor Refuge, Ventura Co., Calif. (cont.)

Hummer sp.?

House Finch

Bewick Wren

Goldfinch sp.?

Raven

Mtn Quail

Mule Deer

Ground Squirrel sp.?

Uma Lizard sp.?

Fence Lizard sp.?

Rufous-sided Towhee

Calif. Thrasher

Plain Titmouse

W.C. Sparrow

Western Bluebird

Brown Towhee

Oregon Junco

Cassin Finch

Band-tailed Pigeon

Calif. Quail

vegetation: Holly-leaf Cherry

Ceanothus sp.?

Bird-leaf Mahogany

Silk Tassel

Scrub Oak

Juniper

Journal

R.E. Johnson
1967

April 21.

Head of Strawberry Canyon, Alameda Co., California. 8AM
 Completely cloudy & light rain. Zoo 107B Field trip
 to run trap line at head of Strawberry Canyon which
 I set from 2-4 PM on April 20 (not raining then, but
 rained lightly off & on throughout night). Trap line
 was a Calhoun line of 20 traps^{sites} set at 50 ft
 intervals, with 3 traps (Museum Specials) at each site.
 Traps baited with oatmeal. Trap line runs down a
 steep (45°) slope covered with patches of brush (mainly
 Coyote Brush), lupine-grass mixture, and open grassland.
 Rain was not hard enough to remove bait &

5 mice were caught as follows:

Stake #	Species	Size	WT	Sex	Reproduction	Habitat
9	<u>Peromyscus truei</u>	136-67-22-19	11	♀	no embryos not lactating	Lupine-grassland
9	<u>Reithrodontomys megalotis</u>	151-76-17-15	10.5	♀	no embryos not lactating	
11	<u>R. megalotis</u>	145-74-17-15	10.5	♀	no embryos lactating	Sagebrush grassland
18	<u>Microtus californicus</u>	129-31-20-14	23.5	♂		Lupine-grassland
19	<u>R. megalotis</u>	140-76-17-15	13.5	♀	embryos: Rt. 5 (11 mm) Lt. 1 lactating	

Trip ended at 10AM. Trap line 3 through
 more extensive grass areas had 5 Microtus & 2
Reithrodontomys + 2 Oregon Juncos.

Orange-crowned Warblers could be heard singing
 lower down the canyon.

Journal

R.E. Johnson
1967

April 28 Tilden Regional Park, Alameda Co., Calif.

Scattered clouds, cool early growing warm. 6-10 AM.

Zoo 107B Field Trip. This was the first Zoo 107B Bird Field Trip since March 3 and the change ~~was~~ in species & activity is quite noticeable. Kinglets & Fox Sparrows are apparently gone. Black-headed Grosbeaks can be heard singing from all sides. Other new arrivals (Warbling Vireo, Cowbird, Olive-sided Flycatcher, Bullock's Oriole, Western Flycatcher, Swainson's Thrush, & Wilson Warbler) are also singing but are not so conspicuously present as the Grosbeaks. A pair of bush-tits were observed building a nest. Also a Steller Jay nest was located in a Eucalyptus tree. Species observed:

x Bush-Tit

Robin

x Black-headed Grosbeak

x Warbling Vireo

Scrub Jay

Steller Jay - nest 30 ft up in Eucalyptus tree

Cowbird (Brown-headed)

American Goldfinch

Mourning Dove

Bullock Oriole

Wren-tit

Chestnut-backed Chickadee

Calif. Gull - flock overhead

Bewick Wren

Song Sparrow

Journal

R.E. Johnson
1967

April 28 Tilden Regional Park, Alameda Co., Calif. (cont.)

Rufous-sided Towhee

Brown Towhee

Valley Quail

Olive-sided Flycatcher

Western Flycatcher

Wilson Warbler

Rufous Hummingbird

Red-winged Blackbird

House Finch

Swainson Thrush

Coot - pulling nest material behind it as it swims
across lake.

Mallard

Canada Goose.

x - species accounts

Journal

R.E. Johnson
1967

April 29 Tilden Regional Park, Alameda Co., California

6-10 AM, cool, clear. Zoo 107 B Field trip. Much like April 28. The Bush-tit nest ~~g~~ building was again observed (see species accounts for both days). A second Steller Jay nest was located, also in a Eucalyptus tree (see species account). A possible nest site of a Chestnut-backed Chickadee was located in the crotch of a Eucalyptus tree (see species accounts). Species list:

Brown-headed Cowbirds

Black-headed Grosbeak

Orange-crowned Warbler

Olive-sided Flycatcher

Bush-tit

Rufous Hummingbird

American Goldfinch

Anna Hummingbird

Bewick Wren

Oregon Junco

Brown Towhee

Robin

Valley Quail

Steller Jay

Mourning Dove

Wren-tit - occasionally singing

Brown Creeper - singing

Pine Siskin

Song Sparrow

Journal

R.E. Johnson
1967

April 29 Tilden Regional Park, Alameda Co, Calif. (cont.)

Plain Titmouse

Rufous-sided Towhee

House Finch

Bullock Oriole

Cedar Waxwing

Wilson Warbler

Turkey Vulture

Red-winged Blackbird

Black Phoebe - pair

Coot

Mallard

Canada Goose

Chestnut-backed Chickadee

Western Pond Turtle

Journal

R.E. Johnson
1967

May 4

Point Isabel, Richmond, Contra Costa Co., California

6:40 - 8:00 PM cool, wind blowing east off bay,
sun setting. Tide high. Few birds seen since
mud flats were largely covered. Species list:

Red-winged Blackbird

House Finch

Spotted Sandpiper

Western Sandpiper

Least Sandpiper

Dunlin

Western Gull

Horned Lark

Journal

R. E. Johnson
1967March 5 Point Isabel, Richmond, Contra Costa Co., California 8-9AM

windy, cool, 100% overcast Zoo 107B Field trip.

High Tide & no mud flats exposed. Species:

Ruddy Turnstone - 2

Sanderling - 2

Western Sandpiper - 15

Least Sandpiper - 1

House Finch

Horned Lark - heard often

Red-winged Blackbird

American Avocet - 3

Gull sp?

Scarp sp?

Western Willet

March 5 no. edge of Golden Gate Fields Race Track Parking area,Alameda
~~Contra Costa~~ Co., Calif.

9-10AM

Zoo 107 Field

trip (cont.).

Forster's Terns - foraging & sitting on posts.

Mallard - 1

Calif. Gull - 1

Western Sandpiper - hundreds foraging around
water line on slightly exposed mudflats.The same Avocets & Willet could be seen
from this location.March 5 Berkeley Marina, Alameda Co., Calif. 10-10:30AM

Red-necked Grebe

Western Grebe

Eared Grebe

Journal

R.E. Johnson
1967

May 5 Berkeley Marina, Alameda Co., Calif. (cont.)

Scoter. sp?

Scamp sp?

Ruddy Duck -

May 5 Berkeley Aquatic Park, Alameda Co., Calif.

Bufflehead - 2 ♀

Mallard - 1 ♀

Scamp sp.?

Robin

Tern, ~~sp~~ Foresters

Mourning Dove

House Finch

Journal

R.E. Johnson
1967

May 6 Point Isabel, Contra Costa Co., Calif.

8-11:30 AM, clear, still, sunny, warm. Zoo 10713 Field trip. High Tide at approx. 10 AM. Species list:

Red-winged Blackbird

Horned Lark - flight song

Song Sparrow

Killdeer

Western Meadowlark

House Finch

Mourning Dove

Barn Swallow

American Avocet - 2

Western Willet

Ruddy Turnstone

Dunlin

Scaup, sp.?

Semipalmated Plover - 2

Canvasback - 2

Whimbrel - several

Long billed Curlew?

Black-bellied Plover - 5

Dowitcher - 6

Baird Sandpiper? (3 or 4)

Western Sandpiper - 100

Marbled Godwit

R.E. Johnson
1967

Journal

~~June 12~~
May

Big Springs Canyon, Tilden Regional Park, Manteca
sunny, warm, still. Zoo 107B field trip (main
objective - reptiles). Canyon is heavily forested
on north facing slope & open grassland on south
slope.

Ash-Throated Flycatcher - calls from branches
toward top of 50 ft tree (an uncommon
migrant)

Cedar Waxwings - numerous flocks seen in
flight.

Calif. Quail - calls heard often.

Mourning Dove

Feral Cat - 2 young under a Calif Sage
bush (3x8x5 ft) on grass south slope. Cat
had climbed from nest.

Black headed Grosbeak - several seen flying
from trees

Bewick Wren - common, singing

Wren T.t - singing [about 10-15 wren tits &
wrens appeared to be moving out, when
the cat is on the open slope away from
its young]. One Wren-tit was seen
to chase a nearby (4 ft) wren for 5 ft.

Olive-sided Flycatcher

Anna Hummingbird

Plain Titmouse

House Finch

Stellar Jay

Wilson Warbler - very active, in willow tree.

Journal

R.E. Johnson
1967

~~March~~ 12
May

Big Springs Canyon, Tilden Regional Park, Montana
(cont.)

Brown Towhee

Savannah Sparrow(?) - sang from coyote bush
top on grass slope.

White-crowned Sparrow

Western Bluebird

Red-tailed Hawk - call while in flight (singing)

Orange-crowned Warbler

Fence Lizard - each lizard caught has
mites either on its neck or in its ears
or both.

Journal

R.E. Johnson
1967

May 15

Ice House Canyon, Angeles National Forest, Baldy District, California, warm, clear, still. Hiked from ^{four miles} parking area at lower end of canyon, to saddle at upper end of canyon where the trail splits (south to Cucamonga Pk, Ontario Pk, & Kelley's Camp & north to Timber Mtn, Telegraph Pk, & Baldy Notch). Creek in Icehouse canyon is the largest I have ever seen it, being 6-10 Ft wide and 1-2+ Ft. deep. Trail follows bottom of canyon along the north side of the creek. No snow was encountered along the trail until the last mile where snow formed a nearly continuous blanket $\frac{1}{2}$ to 2 Ft deep. Streamside willows had not~~ed~~ begun to leaf out yet. In the lower portions of the canyon Steller's Jays, Black-headed Grosbeaks, Wood Pewees (song commonly heard), Bewick's Wrens, & Violet-Green Swallow were noted. This area is mainly a rugged, boulder-filled wash with alders, willows, canyon live oak, & conifers (neglected to record species composition).

Higher in the canyon where snow remains on the ground, Ponderosa Pine, Sugar Pine, & White Fir form the overstory and Bush Chinquapin & Manzanita the understory. Here Townsend Solitaires, Mt. Bluebirds, & Oregon Juncos were found on the ground or snow and Pewees, Mtn. Chickadees, Audubon's Warblers, a Hairy Woodpecker, and

Journal

R.E. Johnson
1967

May 15 Icehouse Canyon, Angeles National Forest, Baldy
District, California (cont.)
& Stellers Jays.
a Dusky Flycatcher, were heard in the trees.

Johnson, R. E.

1967

Species Account

American Egret

R.E. Johnson
1967

March 19

Stinson Beach, Marin Co., California - waterways next to exposed mudflats (low tide) north of Stinson Beach. Warm, sunny, partially cloudy. 2-3 PM. Many (12 within 200 yds of me) scattered over margins of mud flats. Walk slowly, usually not wading very deep considering their leg length, with neck sometimes held nearly verticle-like a sentinal. Stand with neck in "S" + bill tilted downward + then make quick stab with bill. Appear quite efficient, ie each stab appears to result in food capture + a swallow. Frequently wade^{+ feed} in shallow water containing greenish seaweed, yet don't seem to get food entangled with seaweed (in contrast to Blue Heron). Feeds at more rapid rate than Heron. In 10 minutes it stabbed 24 times while slowly walking along. (At least one of these^{"stabs"} did not appear to result in a swallow, however). During this time it moved slowly back + forth over the same small (20 ft²) shallow (3-4 inches) area of seaweed laden water. Once a shining, wiggling object was seen caught (fish?). Once the bird spotted food to the side after having planted his feet in another direction - he stabbed^{while} crosslegged^(ie turned body) rather than ~~turning~~ moving feet.

See Great Blue Heron for notes on walking.

The only apparent difference is that the egret's head bobs more with each step + ~~the~~ it also feeds + walks more so that its head + neck ~~and~~ are

American Egret

R.E. Johnson
1967March 19 Stinson Beach, Marin Co., California (cont.)

more frequently angled forward. The heron is more often erect both when standing & walking.

Continued observation indicates that both heron & egret will wade above "knees" while feeding, but perhaps (??) heron does so more often.

June 8

In grading a Zoo 107B Term Project by Richard Dehlinger, who studied the three species of Ardeidae ~~in~~ in this same area [Bolin's Lagoon (north of Stinson Beach) and Audubon Canyon Ranch (east side of lagoon)] I note the following points: ① Amer. Egrets (& Great Blue Herons) ^{colonies in} nest in the tops of second growth redwood trees at Audubon Canyon Ranch. ② The lagoon is deeper at its northern end & greater concentrations of birds occur there. ③ Amer Egrets (& Herons, but not Snowy Egret) feed also in adjacent marshy areas. ④ Amer. Egrets arrive later & leave earlier to feed (from nesting area) than Herons. ⑤ Amer. Egret feeds at faster rate than Heron ⑥ Amer. Egret is more efficient at feeding on fish (greater % successful "stabs"). ⑦ Amer. Egrets (& Herons) appear to feed on crabs in Ulva beds in the lagoon.

R.E. Johnson
1967

Snowy Egret

March 19 Stinson Beach, Marin Co., California - waterways next to mud flats exposed by low tide north of Stinson Beach. Three feed in shallow water among American Egrets (the latter being more numerous). Snowy Egrets will run through water after food before stabbing at it (Amer. Egret walks more slowly - "stalking" in most cases. The ^{Great Blue} Heron appears ^{still} slower than the Amer. Egret).

June 8 Stinson Beach, Marin Co., California (cont.)
In grading a Zoo 107B Term Project by Richard Dehlinger, who studied the three species of Ardeidae in this same area, I note the following points: ① ~~The~~ Bolinas lagoon is deeper at its northern end & greater numbers of birds occur there. ② Snowy Egrets were not seen in adjacent marshy areas (other species were). ③ Snowy Egrets feed more rapidly than the other species and will chase food rather than let food come to them ④ They wade in narrow streams or channels where their feed scare up prey which can't escape to the side to to channel width & this facilitates feeding ⑤ pairs feed together in "teamwork". Each scaring up feed with its feet for the other.

Great Blue Heron

R E. Johnson
1967

March 19

Stinson Beach, Marin Co., California, waterways adjacent to mudflats exposed by low tide, north of Stinson Beach.

Warm, sunny, partially cloudy.

Two herons found in same area as the 12 American Egrets (& also 3 Snowy Egrets). One flew over & circled while croaking as if disturbed. Feeds in similar manner to American Egret (wading in shallow water, standing with neck in "S" & then making quick stab) but appears to be less efficient. It always appears to come up with a small (1½-2 inch) shiny wiggling object (fish?) but it usually also has a beak full of algae. Several quick beak movements are required to separate the fish & algae & on occasion the fish is nearly lost. Seen to place beak beneath water & then ^{remove &} tilt head up as if to drink (sea water) — perhaps somewhat brackish since several small streams enter from the east. One flew to the vicinity of an American Egret & the egret flew, the heron then continued toward another egret which also flew; each egret landed a short distance out of the general path of the heron.

Heron appears to feed very infrequently (especially when compared to Amer. Egret), perhaps it is feeding on larger prey(?). Both birds usually walk with neck forward at angle & straight when searching for food



, then crouch into "S" when food is spotted. They may continue to walk forward while in crouch & even body is lowered. If "jab" is forward neck's length,

Great Blue Heron

R.E. Johnson
1967

March 19

Stinson Beach, Marin Co., California (cont.)

Then quick forward step may be necessary to correct balance. Walking while searching appears the same for both species. Weight is kept on forward leg until rear leg has been brought well forward of it, then ~~rather abruptly~~ the body moves & weight is transferred. Head jerks with each step, but much more so ~~in~~ in Egret.

One heron seen to wade up to feathered part of leg (well above "knee"). [see Amer. Egret - page 2]. Apparently Amer. Egret will also ~~be~~ wade this deep while feeding, but may not do so ~~as~~ as often. One heron waded ~~to within~~ so that body was within one inch of water & continued feeding in this location for 20 minutes.

On take off into air from land, one individual was observed to jump or spring into air. Landing may involve several decelerating steps. Alula is extended out from wing on landing.

Heron is very inconspicuous in water with floating seaweed, especially toward sundown (4:40 PM & overcast). Egrets are very conspicuous in same locations.

Continues to feed in same area as tide comes in & mud flats are covered with water. (4:50 PM).

A heron flew up & actively chased a nearby (20ft) Amer. Egret.

R.E. Johnson
1967

Great-blue Heron

June 8

Stinson Beach, Marin Co., California (cont.)


In grading a Zoo 107B Term Project by Richard Dehlinger, who studied the three species of Ardeidae in this same area [Bollinas Lagoon (north of Stinson Beach) and Audubon Canyon Ranch (east side of lagoon)] I note the following points: ① Great Blue Herons (& Amer. Egrets) nest in colonies in the tops of second growth redwood trees at Audubon Canyon Ranch. ② The lagoon is deeper at its northern end and greater concentrations of birds occur there. ③ Herons are relatively more common in the southern part of the lagoon than the other 2 species. ④ Herons (not others) fly (in small numbers) to feed in tide pools at low tide. ⑤ Herons (& Amer. Egrets) may also feed in adjacent marshy areas. ⑥ Herons begin feeding (arrive from nest area) earlier & remain later than American Egrets. ⑦ Heron feeds more slowly than Amer. Egret. ⑧ Heron is less efficient (fewer successful attempts (%) to catch fish) than Amer. Egret. ⑨ Herons (& Amer. Egrets) appear to feed on crabs in Ulva beds in the lagoon.

Ruddy Duck

R.E. Johnson
1967

March 19

Stinson Beach, Marin County, California — waterways adjacent to mudflats exposed by low tide. 2:00 PM. Warm, scattered clouds. Groups of ruddy ducks (mixed ♂ & ♀) move together, first swimming south down waterway & then turning more or less as a group and swimming back again. Turns are often concurrent with meeting another group coming toward them. There may be some interchange of group members or groups may join. If groups both turn, ~~some~~ some individuals appear undecided as to which group to follow since they will turn & follow each briefly before finally joining one group. Males (white cheek patch) are in various stages of plumage. Some have blue bills, others do not (A few have reddish feathers on back.

Birds are mostly floating with head out, but a few have bills tucked in behind wing. Birds with bills tucked swim with group & appear to have no trouble navigating or turning with group. Why, then, do they tuck their bill? Only 2 or 3 dives were noticed in an hour among a group of 30± ducks. Some birds swim with tail up (angle differs between individuals () and others with tail beneath water level (but visible just below water). This does not appear to be correlated with stage in molt or with sex. No individual was seen to swim with ^{both} tail under & tail out.

California Condor

R.E. Johnson
1967



April 9

Sespe Creek Condor Refuge, Ventura Co., California -

Sunny, warm, breeze from south, hazy clouds. Observations from Dough Flat looking at high cliffs containing many holes. Observations beginning 2:45 PM. One bird (adult) flew across face of cliff & out of sight. Vultures & Red-tailed Hawks frequently circle area. An ^{adult} condor circles & lands on top of cliff. Shortly ^(2-3 minutes) a second adult lands beside the first bird. One bird mounted the second within 2 minutes after the two birds were together. The upper adult spread & flapped its wings slowly. Copulation lasted at least a minute. After copulation one adult appeared to ~~move~~ lower & then raise its head in front of the other. This was done slowly and several times at $\frac{1}{2}$ minute intervals. They ~~were~~ were facing each other during this time and ^(several minutes) this activity was followed by a period when the bills of the two birds were placed together but resolution was such that I could not tell exactly what was happening at this point.



Birds remained on the ledge for more than a half hour after this, sitting side by side & occasionally walking a few feet. We left ~~at~~ after 4 P.M. with the birds still sitting on the ledge. Fred Sibly (US ^{Wildlife} Fish & indicated that they probably will fly down into a hole in the cliff before dark.

Wings are held very constant in flight & nearly outstretched straight , in contrast to vulture dihedral .

Red-tailed Hawk



R.E. Johnson
1967

March 3

Tilden Regional Park, Alameda Co., California

Partially cloudy, windy (10 mph), cool. 9:30 AM.

Pair of hawks hovering close together (30 ft) both facing west near crest of NS running ridge.

Apparently they are riding an updraft. Each has its head bent down as if watching for prey on the ground. Maintenance of position seems to be accomplished by adjustment of tail width & position, wing bending ( ) and perhaps wing tip feather slotting. Feathers are usually widely slotted. Occasionally flaps wings slightly (2-3 beats). Tail ~~moves~~ ^{tilts sideways} from horizontal to various angles with gusty winds (— / \) while bird & wings remain horizontal.

Pair separate & hover $\frac{1}{4}$ mile apart, later (10 min) one returns over other and upon flying with 1 vertical foot over other it folds its wings to within a few inches of body and appears to land (legs down) on back of lower bird. It remains "piggy-back" for several seconds, but there is no additional contact (only legs of upper bird and back of lower; no bodily or cloacal contact).

They again separate & hover $\frac{1}{4}$ mile apart. One folds its wings, lowers its legs & dives $\frac{1}{2}$ way to ground & stops again hovering. Shortly it dives again to a lower level, now keeping its legs down as if ready to strike. This hovering continues for several minutes & then a ^{large house} cat

Red-tailed Hawk

R.E. Johnson
1967

March 3

Tilden Regional Park, Alameda Co., Calif. (cont.)

appeared below and the hawk immediately flew away. Perhaps the cat was the object of prey but more likely it was after the same item as the hawk was watching. Probably the cat was too big to be attacked by the hawk. The hawk returned again to the second hawk, hovered near it for less than a minute, then returned again to the area where the cat was seen. All of this action took approx. 30 minutes.

The ground beneath the hawks is open dry grassland (west facing) with extensive patches of coyote bush in it.

(One of the students reported seeing ~~that~~ one hawk on the back of other (as described above) a second time while I was looking elsewhere. He noted that lower bird also had legs extended downward.)

Willet

R.E. Johnson
1967

March 19

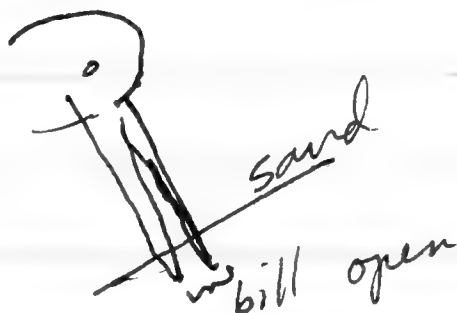
Stinson Beach, Marin Co., California - feed scattered over mudflats north of Stinson Beach. Notes heard: ① kee-a, second note lower. ② kuk-kuk-kuk....etc when disturbed by my presence. Finally flew & kuk's graded into a louder scream & then kukes in the air in flight.

While standing it bobs its head up & down.

April 8

Santa Barbara, Calif. - clear, cool evening. 6:15-6:45 PM

Two willets observed foraging along shoreline of sandy public (vacant) beach. They will often wade up to full length of legs and will probe with face & even entire head (once) beneath water. Probing is done with bill open & both mandibles placed beneath surface & bill "pumped" up & down in sand. The position of the tongue could not be seen. It seems peculiar that they should probe in this manner since ~~not~~ large items were handled with the bill which ~~would~~ require so wide a bill opening. In fact ~~no~~ objects were handled with the bill & there was no indication that any food was obtained.



Birds run in & out with the tide on the beach, often running 30 ft. out with receding water to probe in to sand. These runs appear to be directed

Willet

R.E. Johnson
1967

April 8

Santa Barbara, California (cont.)

at the distant feeding location almost as if they could see a specific Food item at a distance & even before it is ~~up~~ uncovered by the tide. They often turn their backs on the water & probe seemingly oblivious of the threat of the waves. Perhaps this only is true when the waves are small (mean 1 ft. ^{high,} max $1\frac{1}{2}$ ft.). Facing toward shore may facilitate rapid escape when the water rushes in. Considerable Feeding is done while running in with the tide. A typical foraging route involves a rapid dash out with the receding water line and follow by feeding, a series of rapid retreats punctuated by short probing periods. The birds appear to have an uncanny ability to estimate the depth of the water & its rate, et al. of movement so ^{that} they never get hit by a wave even though they do not face it. Perhaps tactile receptors in the feet or legs supply information as to movement rate & depth? allowing accurate estimates & predictions of the advance of each wave.

Anna's Hummingbird

R.E. Johnson
1967

Jan. 11

Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif.

3:40 PM. A ♂ "buzzed" over and landed on top of a tall (15 ft.) scrub oak bush which overlooks a brushy slope (coyote bush, thistle, poison hemlock. Approx. 20 min. later he began to sing from that perch, the song continued virtually uninterrupted for several minutes. (these details recopied from days Journal).

Jan. 12

8:00 AM. ♂ on top of tall coyote bush in same brush area as Jan 11. Later it sang as it flew slowly overhead.

10:00 AM. A ♂ dives at a Hutton's Vireo feeding in the top of coyote bush in a different brush patch than before. The vireo moved about, not necessarily in response to the attack, but remained the focal point of three subsequent dives.

March 4

Strawberry Canyon, Alameda Co., Calif

Sunny, warm, south facing oak-grass slope. One ♂ seen perching on highest twig of various species of bushes, which include Coast Live Oak, Elderberry. On one occasion it landed on lower coyote bush top, rather than taller poison oak stem. (Possible aversion to poison oak). It seems to have several favorite perches scattered 20 or more feet apart. All activity centered over coyote bush-oak, etc brush patch 3-4 ft high. Song heard occasionally. Several dives observed. Flies straight up into air, turns & dives straight down, curving into a U & up again, making a high "vrip" at the bottom. Dives oriented toward & away from sun. Area covered by bird is at least 30 yds on a side.

Anna's Hummingbird

R.E. Johnson
1967

Jan. 11

Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif.

3:40 PM. A ♂ "buzzed" over and landed on top of a tall (15 ft.) scrub oak bush which overlooks a brushy slope (coyote bush, thistle, poison hemlock. Approx. 20 min. later he began to sing from that perch, the song continued virtually uninterrupted for several minutes. (these details recopied from days Journal).

Jan. 12

8:00 AM. ♂ on top of tall coyote bush in same brush area as Jan 11. Later it sang as it flew slowly overhead.

10:00 AM. A ♂ dives at a Hutton's Vireo feeding in the top of coyote bush in a different brush patch than before. The vireo moved about, not necessarily in response to the attack, but remained the focal point of three subsequent dives.

March 4

Strawberry Canyon, Alameda Co., Calif.

Sunny, warm, south facing oak-grass slope. One ♂ seen perching on highest twig of various species of bushes, which include Coast Live Oak, Elderberry. On one occasion it landed on lower coyote bush top, rather than taller poison oak stem. (Possible aversion to poison oak). It seems to have several favorite perches scattered 20 or more feet apart. All activity centered over coyote bush-oak, etc brush patch 3-4 ft high. Song heard occasionally. Several dives observed. Flies straight up into air, turns & dives straight down, curving into a U & up again, making a high "vrip" at the bottom. Dives oriented toward & away from sun. Area covered by bird is at least 30 yds on a side.

Anna's Hummingbird

R.E. Johnson
1967

March 4

Strawberry Canyon, Alameda Co., Calif.

Sunny, warm, south facing oak-grassland (cont.)

No flowers anywhere near defended area. A few poppies were seen $\frac{1}{4}$ mile away. Hummer would hover & move about among limbs of oak, coyote bush, & poison oak as if looking for insects, but no feeding was observed.

It perched several times within 5 ft feet of our Zoo 107 party of 8, usually it faced away from us. It was seen to wipe its bill on a branch, & to preen its Rt. wing. The hummer also used the afore mentioned perch next to the taller poison oak on two more occasions indicating a definite preference for that perch & apparent aversion to poison oak.

A scrub jay lit on another of the hummers favorite perches while the hummer was on it. The hummer left immediately, flying to a new perch 20 ft. away and instantly ~~beginning~~ singing (had been silent previously). Perches are located above surrounding vegetation & range from 6 to 16 ft. above the ground.

Yellow-bellied Sapsucker

R.E. Johnson
1967

March 3

Tilden Regional Park, Alameda Co., Calif.

Partly cloudy, windy, occasional warm sun, otherwise cool.

11:30 AM. Twice a "red-breasted" type probed in holes on a large (10 inch) vertical limb of a Coast Live Oak (one of several trees in a cluster along a creek bottom). No pecking sound was heard. Holes occur down onto 14 inch branch & up to 6 inch limbs. Holes on larger limbs look fresh (reddish bark showing) with bark bared around holes. Holes on smaller limbs are mostly older (blackened) & tend to be in more regular rows ($1\frac{1}{2}$ inches \pm between rows) around limb. Holes appear to be larger on the larger limbs. Holes occur in horizontal & vertical limbs.

Bird returns at 12 noon & probes deep into fresher looking holes on 6 inch limb. It probes at all angles, twisting head & bill from side to side. It then rests, looking from side to side occasionally & blinking eye (upper lid coming downward but perhaps not all the way to lower lid). Moves back to same holes & probes & peeks in them quietly, then moves away to large limb, then back again to same holes (preferred). There doesn't appear to be any pattern ~~or~~ relationship between old & new holes. New ones occur scattered among old & sometimes overgrown ones.

Inspected holes. Holes appear to go through back too wood (not certain). Holes in limbs from 2-14 inches

yellow-bellied Sapsucker

119

R. E. Johnson
1967

March 3

Tilden Regional Park, Alameda County, Calif. (cont.)

in diameter. Holes smaller & less deep in smaller branches.

Max. depth in largest limbs (thickest bark) - $\frac{3}{4}$ "

More commonly depth is $\frac{1}{2}$ inch on large branches.

Barked removed from edges of holes, may aid in
(allows face to go deeper),
pecking through bark, since it occurs only on
biggest limbs. Holes often oval to elliptical laterally.

Holes occur on ^{living} limbs laying on ground. Perhaps
size of limbs drilled in is determined with ① minimum
~~size~~ size they can perch on + ② maximum size they
can drill through. Small (up to $\frac{3}{16}$ " ~~ph~~ chips

of fresh bark were found in branch crotches.

(On ~~Feb~~ Jan 12 sapsuckers [trace?] were seen
feeding high in Eucalyptus trees - see Journal).

Downy Woodpecker

R.E. Johnson
1967

March 4

Strawberry Canyon, Alameda Co., Calif.

Sunny, cool, still. Southfacing slope of oak-grassland.

Woodpeckers feeds on small (1 inch) limbs just under canopy
of 30 ft. Coast Live Oak. Limbs smaller than those used by
Y-B Sapsuckers.

R.E. Johnson
1967

Scrub Jay

April 8

Santa Barbara Museum of Natural History, Santa Barbara, Calif.

Clear, sunny, 4:15 PM. Oak (Q. agrifolia), Sycamore, Elderberry hillside. Scrub Jays were observed on two occasions to drink water from a hole (rotted out knot) in a large limb of a 30 ft tree (sp.?, broadleaf, pinnate, with catkins 5 inches long).



The bird would land, look to either side & then ~~then~~ bend its head down into the hole for a short time, then return to normal posture where it would raise its bill slightly & swallow.

R.E. Johnson
1967

Steller Jay

April 29 Tilden Regional Park, Alameda Co., Calif.

cool, clear, sunny. 8:30AM. Probable nest in top of live
brocken off Eucalyptus tree. 25ft up. Both adults seen to
come & go. Exit is by silent swooping glide. Nest
itself is not visible but must be hidden by leaves.

Red-breasted Nuthatch

R.E. Johnson
1967

March 4

Strawberry Canyon, Alameda Co., Calif

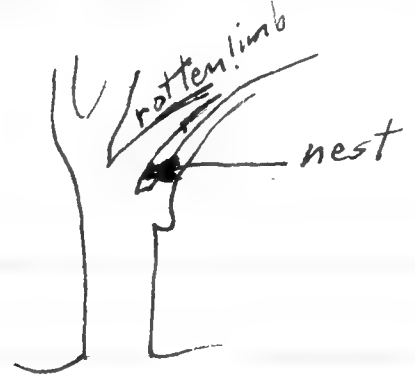
Warm, sunny, oak-grassland south facing slope with patches of brush & patches of pines.

Two (pair) birds in open stand of Italian Stone Pine. One bird, ^(apparent ♂) has more red on upper breast than other (apparent ♀). The ♀ pecks at hole in dead tree (pine), perhaps widening it for nest cavity or perhaps looking for food or part of courting procedure. The ♂ flies up & feeds ♀ then flies off. She continues to peck. Later leaves & returns again. Both feed in a live pine, searching main trunk at 10± ft. up & also around cones on branches. [♀ stood facing sideways & partly downward while working on hole]. Bush-tits also present, one Nuthatch give brief chase & bush-tit flew short distance. 11:30^{AM} - 12:00 noon

Chestnut-backed Chickadee

R.E. Johnson
1967April 29 Tilden Regional Park, Alameda Co., Calif.

Sunny, clear 8AM - Possible nest in rotten base of limb of Eucalyptus tree, approx. 12 ft. up. One bird entered, then after a delay, left rapidly. The other adult sat in an adjacent tree 15 ft. away.



Plain Titmouse

R.E. Johnson
1967

March 3

Tilden Regional Park, Alameda Co., Calif.

Partly cloudy, breeze, sunny off & on. 11:45 AM.

Watched a titmouse for 15 min. From underside of 30 ft Coast Live Oak in which it foraged. It hopped along larger (up to 8 inch diam) limbs of interior of tree pecking, stabbing, & hunting deliberately & at slow rate. Whips bill often. Moved to exterior leaf layer of tree briefly, then back to interior. One hung upside down on end of branch. Quiet during whole period.

Later one gives song of chickadee type. (Earlier in day several were seen along a creek bottom in ^{low} willows (5-10 ft) in coyote brush hills.).

March 4

Strawberry Canyon, Alameda Co., Calif.

Sunny, warm, south facing oak grassland slope.

Again observed foraging in interior of ^{Coast Live Oak} tree as much as in leaves to exterior. Variety of notes (really note sequences) heard. Usually a hoarse (though often faint) note precedes or follows other notes.

Bush-tit

R.E. Johnson
1967

March 4

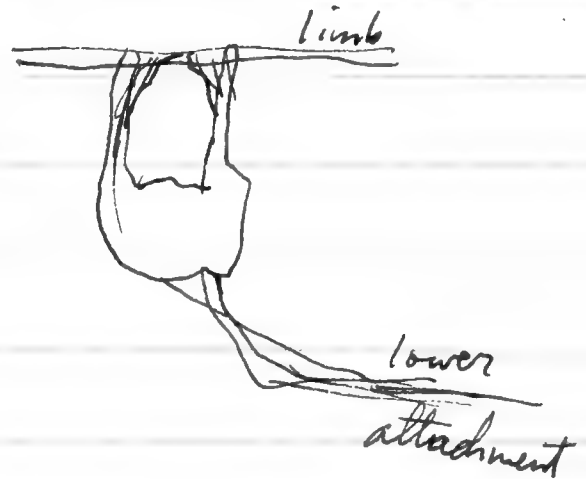
Strawberry Canyon, Alameda Co., Calif.

Sunny, warm, 9:20 AM. Oak-grass south facing slope. Bush-tits feed in leaf (outer canopy) layer of Coast live Oak trees. Usually make light "tit" sound as they move through trees. Usually several together in loose group so that continuous twittering emits from tree.

April 29

Tilden Regional Park, Alameda Co., Calif., near "Playfield" area.

Clear, cool, sunny, still. Pair of bush-tits building a nest 16 ft up in a Douglas Fir tree, one of several in a clump of firs (all 30-40 ft high) at roadside on a east facing brushy slope. Nest is pendant & 8 inches long and $2\frac{1}{2}$ inches wide. Nest is only partially completed. Pair appears at nest together at 7:00 & 7:15 AM. I believe both members of pair actually contributed to building. They remained at the nest for 70 sec. One returned at 7:16 & again one at 7:20 AM. The nest appears to be attached at the bottom & top. It appears that it hangs from 2 strands & that bottom is completed first. Nest is made of dry thin leaf-like material & light green lichen.



April 29

Tilden Regional Park, Alameda Co., Calif.

7:30 AM - pair return to nest twice together to build. It appeared that only one adult did the building, at least on the second visit. ~~This other~~ bird carried no nest material & did not enter the nest.

7:45 AM - 2 Bush-tits peck & pull at edge of a loose

Bush Tit

R.E. Johnson
1967

April 29 Tilden Regional Park, Alameda Co., California (cont.)

piece of bark on a Eucalyptus (or perhaps picking up
spider webs ^{or insects} beneath this bark).

A second nest located in lower end of a long
pendulous clump of Eucalyptus leaves 30 ft above road.
Nest may be complete. Again constructed of dry, light wt.
material + lichen.

R.E. Johnson
1967

Ruby-crowned Kinglet

March 3 Tilden Regional Park, Alameda Co., California

Partly cloudy, windy, cool. 11:30 AM. One (or more?) in large (30 ft) Coast Live Oak (one of several in cluster along creek bottom). Moves from small (\pm inch \pm) limb to another searching & pecking. Also moves into leaves sometimes. Not sure if breeze tends to drive him into interior of tree or if he uses these interior (1-5 ft below crown) branches regularly. Later a brief, incomplete song heard (1st song of season noted on Feb. 28 - see Journal).

R. G. Johnson
1967

Warbling Vireo

April 28

Tilden Regional Park, Alameda Co., Calif. - partly cloudy, warm.

A pair feed together in willows near stream so. of Jewell Lake. They seem to have a slow deliberate foraging pace. They do considerable looking before doing any feeding. Half the pecks made occurred while in flight. The bird would fly several feet & hover while picking an insect from a leaf or catkin at the tip of a branch, & then fly to a new branch to land. Thin branch tips are probably not strong enough to support the Vireo's weight and most of the greenery is located there. Several times a Vireo was seen to use the branch on which it stood to aid in manipulation of a small caterpillar captured on a preceding flight. Some feedings were followed by bill whipping.

R.E. Johnson
1967

Audubon Warbler

April 8

Santa Barbara Museum of Natural History, Santa Barbara, Calif.

Clear, sunny, still. Oak slopes & sycamore creek bottom.
Three (1 mature male) birds foraging in top of 70 ft
Sycamore. Spend a large portion of time eying branches &
leaves from each perch without making any foraging
attempts. Forage in leaves & fly down (2-5 ft) to
larger (2 inch diameter) limb to consume food secured
in leaves. This consisted primarily of $\frac{3}{4}$ " green
caterpillars. Whipped bill on limb after most feeding bouts.

Black-headed Grosbeak

R.E. Johnson
1967April 28 Tilden Regional Park, Alameda Co., California

Cold, scattered clouds. 8:20 AM. Fight in limbs of oak tree (3 birds: 2 ♂'s & 1 ♀). One male leaves. Other male displays — tail tilted downward 30° from horizontal & spread widely, wings spread $\frac{1}{2}$ way out & quivering. No notes were observed. ♀ disappeared. Display was performed on a ~~1~~ 1 inch limb of oak & was begun when ♀ was 2 ft. away.

Brown Towhee

R.E. Johnson
1967Jan. 11 Wildcat Canyon, Tilden Regional Park, Contra Costa Co., Calif.

3:30 PM., overcast & cool. One heard chirping within Brush (Coyote Brush, Poison Hemlock, Scrub Oak, Thistle) and considerable scratching was heard, probably by this species.

5:00 PM Two birds Feeding in leaf litter on trail through willows near Jewel Lake in association with 2 Golden-Crowned Sparrows.

Jan. 12

7:50 AM, ground wet from light rain the preceding night. Sky clear. Several birds feed (in separate locations) in a grass-forb area 50ft south of the brush area referred to on Jan. 11. Two work along the margin of asphalt adjoining this area. Scratching in dirt is done with both feet at a time. Peck in dirt & grass. Seen to pick up grass stalks as ~~if~~ they were food and then discard them. "Pish" call resulted in 2 birds flying up from ground into live oak tree.

Golden-crowned Sparrow

R. E. Johnson
1967

March 4

Strawberry Canyon, Alameda Co., Calif.

Sunny, warm, South facing Oak-grass slope. Several seen scattered in various oaks, usually 3-6 ft above ground feeding in outer branches in leaf layer in sunlight.

Appear to be feeding on under surface of leaves.

Inspection of leaves indicates numerous $\frac{3}{16}$ inch caterpillars are present, sometimes 3 to a leaf.

Johnson, R.E.

1967

Catalogue

119 - 130

131 - 282

Calif

Oregon

Idaho

Wash.

Montana

Wyo.

Colorado

R.E. Johnson

Catalogue

Emigrant Peak, 2 mi. W. of Squaw Valley, 8600 ft., Placer Co., California

May 27, 1967

119	♂	Leucosticte tephrocotis	7x6 mm	skull	os.	
120	♂	"	"	8x7 mm	skull	os.
121	♂	"	"	8x6 mm	skull	os.
122	♂	"	"	8x6 mm	skull	os.
123	♀	"	"	ovary	ovum	skull
124	♂	"	"	6x5 mm	1.5 mm	os.
				9x7 mm	skull	os.

Basin Peak, 4 mi. n. of Soda Springs, 8900 ft., Nevada Co., California

May 29, 1967

125	♂	Leucosticte tephrocotis	8x6 mm			
-----	---	-------------------------	--------	--	--	--

Sierra Buttes, 2 mi. nnw of Sierra City, 8300 ft., Sierra Co., California

May 30, 1967

126	♂	Leucosticte tephrocotis	9x7 mm	skull	os.	27.0g.
127	♂	"	"	skull	os.	26.4g
128	♀	"	"	ovary	ovum	skull
				5x3	1 mm	os
				brood patch		
129	♂	"	"	9x7 mm	skull	os.
					os.	25.7g

2 mi. se of Mt. Shasta, head Squaw Creek drainage, Siskiyou Co., California, 9300 ft.

June 11, 1967

130	♀	Leucosticte tephrocotis	ovary	ovum	skull	(no brood patch)
			8x7 mm	2.5 mm	os.	25.8g

Catalogue

R.E. Johnson

2 mi. se of Mt. Shasta, head Squaw Creek drainage, 9300 ft.
Siskiyou Co., California

June 11, 1967

131.	♂	Leucosticte	Tephrocotis	7x8mm	skull os	23.4g
132	♂	"	"	11x9mm	skull os	24.7g
133	♂	"	"	10x8mm	skull os.	25.7g.
134	♂	"	"	9x8mm	skull os.	25.0g

4 mi se of Porter Reservoir, 6800 ft., Warner Mtns, Modoc Co., California

June 17, 1967

135	♂	Mountain	Bluebird	11x6mm	skull os	
136		Hyla				
137		Hyla				

June 19, 1967

138		Toad				
139	♂	Williamson's	Sapsucker	5x4mm ovary	ovum	(paired to 140) brood patch
140	♀	Williamson's	Sapsucker	7x7mm	1.5mm	(paired to 139) brood patch

meadow south
100ft ~~west~~ of Dyar Rock, 7750 ft., Crater Lake National Park,
Oregon

June 25, 1967

141	♂	Leucosticte	Tephrocotis	8x6mm	skull os.	26g.
142	♂	"	"	10x7mm	skull os.	
143	♂	"	"	11x7mm	skull os.	27g
144	♂	"	"	11x9mm	skull os.	26g.
145	♂	"	"	7x6mm ovary	os. ovum	24g
146	♀	"	"	10x6mm	1mm os.	brood patch (egg in oviduct) 29g
147	♂	"	"	9x8mm	skull os.	27g

Catalogue

R. E. Johnson

meadow 100 ft. south of Dyar Rock, 7750 ft., Crater LakeNational Park, Oregon

June 25, 1967 (cont.)

148	♂	Leucosticte tephrocotis	10x8mm	skull os.	27g.
149	♂	"	"	skull os	25g

June 26, 1967

150	♂	Leucosticte tephrocotis	8x8mm	skull os.	26g
151	♂	"	"	skull os.	25g
152	♂	"	"	skull os.	28g
153	♂	"	"	skull os.	27g

June 28, 1967

154	♀	Leucosticte tephrocotis	8x6mm	ovary ovum (mated to #155) 1.5mm brood patch	skull os. 27g
155	♂	"	"	10x7mm skull (mated to #154) os	29g
156	♂	"	"	3x3mm skull os.	25g

Applegate Peak, west slope, 7850 ft., Crater Lake Nat. Park, Oregon

June 28, 1967

157	♂	Leucosticte tephrocotis	9x7mm	skull os.	27g
158	♂	"	"	skull os.	26g
159	♀	"	"	ovary ovum skull (mated to #160) os.	brood patch 27g
160	♂	"	"	7x5mm skull (mated to #159) os.	25g

Catalogue

R.E. Johnson

Llao Rock, 7900 ft., Crater Lake National Park, Oregon

June 29, 1967

161 ♂ *Leucosticte tephrocotis* 9x6mm skull os. 27g.

head Cottonwood Creek
Klamath
Mt. Thielsen, 7500 ft., Douglas Co., Oregon

July 2, 1967

162 ♂ *Leucosticte tephrocotis* 10x7mm skull os. 26g

Indian Creek, $\frac{3}{4}$ mi. w. of Steens Mtn, 8900 ft., Harney Co., Oregon

July 4, 1967

163 ♂ *Leucosticte atrata* 10x7mm skull os. 26g

164 ♂ " " 10x7mm skull os. 23g.

3½ miles N. of Steens Mtn, 8400 ft., Harney Co., Oregon

July 5, 1967

165 ♂ Horned Lark 7x6mm skull os. 30g.

July 6, 1967

166 ♂ Horned Lark 9x7mm skull os (mated to #167) 30g

167 ♀ " " 6x4mm 2mm skull os. (mated to #166) 27g

Strawberry Mtn, head of Overholt Creek, 8400 ft., Grant Co., Oregon

July 8, 1967

168. ♂ *Leucosticte tephrocotis* 9x7mm skull os. 23g

Catalogue

R.E. Johnson
~~155~~Strawberry Mtn, 9044 ft., Grant Co., Oregon

July 8, 1967

169	♀	Oregon Junco	ovary 6x5mm	ovum 1mm	brood patch	15g
-----	---	--------------	----------------	-------------	-------------	-----

Rock Creek Butte, north face, 9000 ft., Baker Co., Oregon

July 10, 1967

170	♂	Leucosticte tephrocotis	8x5mm ovary egg in	skull (mated to #171) os.		24g
171	♀	"	12x9 uterus	skull brood patch (mated to #170) os.		31g.
172	♂	"	12x8mm	skull os.		24g
173	♂	"	11x9mm	skull os.		25g

Dixie Campground, 8 mi. ne. of Prairie City on U.S. Hw 26, Grant Co., Oregon

July 9, 1967

174	♂	Black-backed Three-toed Woodpecker	3x1mm ovary ovum	(mated to #175) skull unos.	brood patch	74g
175	♀	" " " " "	8x4mm 1mm (mated to #174)	skull unos	brood patch	69g.

Eagle Cap Pk, E. face, 9200 ft., Union Co., Oregon

July 13, 1967

176	♂	Leucosticte tephrocotis	9x7mm	buccal pouch full		26g.
-----	---	-------------------------	-------	----------------------	--	------

½ mi. e. and ¼ mi. n. of Eagle Cap Pk, 8800 ft., Wallowa Co., Oregon

July 15, 1967

177	♂	Leucosticte tephrocotis	6x12mm	skull os.		26g
178	♂	"	6x11mm	skull os.	buccal pouch empty	24g

Catalogue

156

R.E. Johnson

$\frac{1}{2}$ mi. e. and $\frac{1}{4}$ mi. n. of Glacier Pk, 8500 ft., Union Co., Oregon

July 16, 1967

179 ♀ *Leucosticte tephrocotis* ovary ovum 7x4 1mm (buccal pouch partially filled) brood patch skull os. 25g

$\frac{3}{8}$ mi. w. and $\frac{1}{4}$ mi. n. of Horton Pass, 8910 ft., Wallowa Co., Oregon

July 16, 1967

180 ♂ *Red Crossbill* 3x3mm brood patch 32g

$\frac{1}{2}$ mi. e. and $\frac{1}{4}$ mi. n. of Glacier Pk, 8500 ft., Union Co., Oregon

July 17, 1967

181 ♀ *Leucosticte tephrocotis* ovary ovum 7x3mm 1mm (buccal pouch full) (brood patch) skull os. 27g

182 ♂ " " 8x4mm skull os. 25g

183 ♂ " " 8x12mm skull os. buccal pouch empty 25g

8,600 ft.

$\frac{1}{2}$ mi. e. and $\frac{1}{8}$ mi. n. of He Devil Mtn., Idaho Co., Idaho.

July 20, 1967

159102 184 ♂ *Leucosticte tephrocotis* x atrata 8x7mm (paired to #185) skull os. buccal pouches full 26g

159104 185 ♀ " " skull os. ovary post-ovulatory 7x4 brood patch buccal pouches full 26g

July 21, 1967

159101 186 ♂ *Leucosticte tephrocotis* x atrata 8x7mm [buccal pouch empty or absent] skull os. (paired to 187) 24g

159103 187 ♀ " " skull os. ovary post-ovulatory 6x3mm brood patch buccal pouch empty (paired to #186) 23g

$\frac{3}{8}$ mi. e. + $\frac{1}{4}$ mi. n. of He Devil Mtn., 8200 ft. (ie. lower no. slope of She Devil)

Idaho Co., Idaho.

July 21, 1967

159107 188 ♂ *Leucosticte tephrocotis* x atrata 11x8mm skull os. buccal pouch empty 25g

159106 189 ♂ " " 9x7mm skull os. buccal pouch empty 24g

Catalogue

R.E. Johnson

$\frac{1}{2}$ mi. e. and $\frac{1}{4}$ mi. n. of He Devil Mtn, 8300 ft. (ie. lower n. slope of She Devil),
Idaho Co., Idaho.

July 22, 1967

159109	190	♀	Leucosticte tephrocotis xatrata	ovary 6x3mm	ovum 1mm	post ovulatory	brood patch	24g
				skull os.	buccal pouches full.			

$\frac{3}{8}$ mi. e. and $\frac{1}{4}$ mi. n. of He Devil Mtn, 8300 ft. (ie. lower n. slope of She
Devil), Idaho Co., Idaho.

July 22, 1967

159108	191	♂	Leucosticte tephrocotis xatrata	9x8mm	skull os.	buccal pouch empty	mated to # 192	25g.
159105	192	♀	" " "	ovary 18x7mm	ovum 7x8mm	buccal pouch empty	skull os.	brood patch 27g.
				mated to # 191				

1 mi. n. of Harts Pass, 6800 ft. (ie. head middle fork of Pasayten River), Okanogan
Co., Washington

July 27, 1967

193	♀	Leucosticte tephrocotis	ovum 0.5mm	ovary 4x2mm	buccal pouch empty	skull os.	brood patch	26g
194	♂	" "		4x2mm	buccal pouch empty	skull os.		27g
195	Imma.	" "				skull unos.		25g
196	♂	Golden-crowned Sparrow		12x8mm		skull os.		33g
197	Imma	Horned Lark	(being fed by adults) # 198, 199			skull os.		34g
198	♂	" "		2x1.5mm		skull os.		39g.
199	♂	" "		2x1.5mm		skull os.	brood patch	39g
200	♀	Water Pipit	ovary 6x3mm			skull os.	brood patch	17g
201	♀	" "	ovary 6x3mm			skull os.	brood patch	17g
202	♂?	Mtn. Chickadee		(1.5x1mm)		skull unos	brood patch	11g.
203	♂?	Mtn Chickadee		(1.5x1mm)		skull unos.	brood patch	12g

Catalogue

R.E. Johnson

1 mi. n. of Harts Pass, 6800 ft. (head of middle fork of Pasayten River),
Okanogan Co., Washington

July 28, 1967

			ovary	ovum	buccal pouch empty	skull os.	brood patch	
204	♀	Leucosticte Tephrocotis	7x3mm	1mm				26g
205	Imma	"				skull unos.		24g
206	Imma	"						26g
207	♂	"		2x2mm	buccal pouch empty	skull os.		27g
208	♂	"		1.5x2mm	buccal pouch full	skull os.		27g
209	♂	"		1.5x1mm	buccal pouch empty	skull os.		26g
210	Imma	"						27g
211	♂	"		2x1.5mm ovary	buccal sac full	skull os.		28g
212	♀	Hermit Thrush	5x3mm					20g

1/4 mi. w and 1/2 mi. n. of Scotchman #2, 6500 ft., Bonner Co., Idaho.
 August 1, 1967

213	?	<u>Empidonax</u>				skull unos.		12g.
-----	---	------------------	--	--	--	----------------	--	------

Scotchman #2, 6800 ft., Bonner Co., Idaho.

August 1, 1967

214	♂	Leucosticte tephrocotis	3x2mm		skull os.	buccal pouch empty		24g
215	♀	"	2x3mm		skull os.	buccal sac empty	brood patch	24g
216	Imma. (♂ 1x1mm)	"			skull unos.			25g
217	Imma (♀ 4x3mm)	"			skull unos.			23g.

Snowshoe Peak, 8000 ft., (head of Leigh Cr.), Lincoln Co., Montana

August 6, 1967

MVZ#

159/13

218	♂	Leucosticte tephrocotis	2x2mm		skull os.			23g
219	♂	"	1.5x1mm		skull os.	buccal sac full		23g
220	Imma.	"			skull unos.			22g

- hybrid like wallows

Catalogue

R.E. Johnson

Showshoe Pk, 8000ft. (head of Leigh Cr.), Lincoln Co., Montana

August 6, 1967

221	Imma.	L eucostricte	tephrocotis			skull unos.	22g
222	Imma. (♂ ^{1x1m})	"	"			skull unos.	27g
223	♀	"	"	ovary 5x3mm	buccal sacs full	skull os.	25g

7000ft.

1½ mi. so. of Harrison Lake (¼ mi. w. of Beehive Lake), Selkirk Mtns, Boundary Co., Idaho

August 11, 1967

224	Imma.	Leucostricte	tephrocotis			skull unos.	25g.
225	Imma.	Water	Pipit			skull unos.	17g
226	♀	Leucostricte	tephrocotis	ovary 4x3mm	buccal sacs full	skull os.	brood patch 23g
227	Imma.	"	"			skull unos.	24g
228	Imma.	"	"				23g

3mi. w. + 1mi. so. of Roman Nose, 5000ft., Selkirk Mtns, Boundary Co., Idaho

August 12, 1967

229	♀	Canada	Jay		6x2mm	skull os.	63g
230	♂	"	"		2x2mm	skull os.	73g

¼ mi. e. of Race track Pk, 9000ft., Flint Creek Mtns, Granite Co., Montana

August 19, 1967

231	Imma. ♂	Leucostricte		1x1mm		skull unos.	25g
232	♀	"				skull os.	brood patch buccal pouches empty 26g
233	Imma	"				skull unos.	22g
234	Imma (♀?)	"				skull unos.	25g.
235	Imma	Water	Pipit			skull unos.	19g
236	♂	"	"	2x1mm		skull os.	22g

Catalogue

R.E. Johnson

1/4 mi. e. of Racetrack Pk, 9000 ft., Flint Creek Mtns, Granite Co., Montana

August 20, 1967

237	Imma (♂)	Leucosticte	1x1mm	skull unos.		25g.
238	♂	"	1x1mm	skull os.	buccal sacs full	27g
239	♂	"	1x1mm	skull os.		24g
240	♀	"		skull os.	buccal sacs full	brood patch 24g
241	♀	"	4x2mm	skull os.	buccal sacs full	brood patch 25g
242	♀	"	4x2mm	skull os.	buccal sacs full	brood patch 22g
243	♀	"	5x2mm	skull os.	buccal sacs empty	brood patch 25g
244	♀	"	5x2mm	skull os.	buccal sacs full	brood patch 26g
245	♀	"	4x2mm	skull os.	buccal sacs full	brood patch 23g
246	♂	"	2x1mm	skull os.	buccal sacs full	26g
247	♂	"	2x1mm	skull os.	buccal sac empty	25g
248	♂	Say's Phoebe	2x1mm	skull os.		22g.
249	Imma.	Water Pipit		skull unos.		20g.
250		Pine Siskin				

1/4 mi. e. and 1/2 mi. n. of Crow Peak, 9000 ft., Jefferson Co., Montana

August 23, 1967

250	♂	Pine Siskin	0.5 x 0.5mm			23g.
251	♂	Audubon Warbler	0.5 x 0.5mm			12g.
252	Imma.	Water Pipit		skull unos.		20g

August 24, 1967

253	♀	Leucosticte	3x2mm	buccal sacs full	skull os.	brood patch 23g.
254	Imma.	"			skull unos.	24g
255	Imma	"			skull unos.	26g

R.E. Johnson

Catalogue

 $\frac{3}{8}$ mi. e. and $\frac{3}{8}$ mi. n. of Crow Pk., 8400ft, Jefferson Co., Montana

August 24, 1967

256. ♂ Water Pipit

2x1mm

skull
os.

22g.

257 ♀? Oregon Junco

[ovary?
1.5x1mm]skull
unos.

18g.

Glenwood Lake, 8200ft, Jefferson Co., Montana

August 24, 1967

258 ♂ Northern Phalarope

2x1mm

skull
os.heavy fat
deposits

38g.

259 ♂ " "

2x1mm

skull
os.heavy fat
deposits

35g

MT. Edith, ⁹⁴⁰⁰~~9000~~ft., Big Belt Mtns, Broadwater Co., Montana

August 26, 1967

260 ♂ Imma. Water Pipit

1x1mm

skull
unos.

19g

261 ♂ Imma. " "

1x1mm

skull
unos.

23g

262 ♂ Horned Lark

2x1mm

skull
os.

34g

263 ~~Ruby-crowned Kinglet~~~~6g~~ $\frac{1}{4}$ mi. s. and $1\frac{1}{2}$ mi. w. of Mt. Edith, 9000ft., Big Belt Mtns, Broadwater Co., Montana

August 26, 1967

263 Imma. Ruby-crowned Kinglet

skull
unos.

6g.

 $\frac{3}{10}$ mi. n. and $\frac{3}{10}$ mi. e. of Big Baldy Mtn, 9000ft., Judith Basin Co., Montana

August 27, 1967

264 Imma. Rosy Finch

skull
unos.

26g.

Big Baldy Mtn, 9100ft., Judith Basin Co., Montana, (Little Belt Mtns)

August 27, 1967

265 ♂ Water Pipit

1x1mm

skull
os.

24g

266 Imma. Sprague's Pipit

skull
unos

30g

Catalogue

R.E. Johnson

Big Baldy Mtn, 9100 ft., Little Belt Mtns, Judith Basin Co., Montana

August 27, 1967

267	?	Say's Phoebe		skull os.	20g.
-----	---	--------------	--	--------------	------

 $\frac{6}{10}$ mi. e. and $\frac{6}{10}$ mi. n. of Big Baldy Mtn., 8800 ft., Little Belt Mtns, Judith Basin Co., Montana

August 27, 1967

268	♀	Rosy Finch	6x3mm	skull os.	buccal sacs full	27g.
269	Imma	"		skull unos.		25g.
270	Imma. ♂	"	white 1x1mm	skull unos.		25g.
271	Imma. ♂	"	white 1x1mm	skull unos.		23g.
272	Imma.	"		skull unos.		23g.
273	♀	"	4x2mm	skull os.	buccal sacs empty	25g.

Cabin Mtn, 8100 ft., Little Belt Mtns, Judith Basin Co., Montana

August 28, 1967

274	♂	Horned Lark	2x1mm	skull os.		36g.
-----	---	-------------	-------	--------------	--	------

 $\frac{2}{10}$ mi. s. and $\frac{5}{10}$ mi. w. of Cabin Mtn., 7900 ft., Little Belt Mtns, Judith Basin Co., Montana

August 28, 1967

275	♂	Vesper Sparrow	2x1mm	skull os.		28g.
-----	---	----------------	-------	--------------	--	------

 $\frac{3}{10}$ mi. s. and $\frac{2}{10}$ mi. e. of Kings Hill, 7900 ft., Little Belt Mtns, Cascade Co., Montana

August 28, 1967

276	♂	Horned Lark	2x1mm	skull os.		32g.
-----	---	-------------	-------	--------------	--	------

 $\frac{2}{10}$ mi. n. of Red Mountain, 9400 ft., Silver Bow Co., Montana

August 31, 1967

277	Imma.	Rosy Finch	1x1mm	skull unos.		24g.
-----	-------	------------	-------	----------------	--	------

Catalogue

R.E. Johnson

 $\frac{2}{10}$ mi. n. of Red Mountain, 9400 ft., Silver Bow Co., Montana

August 31, 1967

278	♂	Water Pipit	2x1mm	skull os.	21g.
-----	---	-------------	-------	--------------	------

1 mi. s. of Fall River Pass, 13000 ft., Larimer Co., Colorado

Sept. 17, 1967

279	♂	Brown-capped Rosy Finch	1x1mm	skull ?	28g
-----	---	-------------------------	-------	------------	-----

 $\frac{1}{8}$ mi. n. to $\frac{1}{8}$ mi. east of Medicine Bow Peak, 11600 ft., Snowy Range, Albany Co., Wyoming

Sept. 16, 1967

280	♂	W.T. Ptarmigan	4x4mm		391g
281	?	Water Pipit			21g
282	?	Water Pipit			21g

Orinda, Contra Costa Co., California

Nov. 2, 1967

283	♂	Golden-crowned Sparrow	2x1mm	skull os.	29g
-----	---	------------------------	-------	--------------	-----

Continued on next page

119-282 are MVZ accession #10711

Johnson, R.E.

1967

Journal

Calif

Oregon

Idaho

Wash,

Montana

Wyo

Colorado

R.E. Johnson

Summer 1967 - Rosy Finch Collecting

Squaw Peak Trip May 21

Northern Sierras Trip (Squaw Pk, Castle Pk, Sierra Buttes) May 27-30

Mt. Shasta Trip June 9-11

Warner Mtns Trip June 17-19

Summer Collecting Trip to Oregon, Washington, Idaho, Montana, Wyoming,
& Colorado. June 24 - Sept. 20

R.E. Johnson
1967

Journal

8:30 - 10:00 AM

May 21

Squaw Valley, Placer Co., California - 6100' + 100' - 1100', clear, sunny, still. Meadows covered with 1-2 ft of snow except on north side of valleys near road where sun hit the snow floor for the longest intervals. Here willows are beginning to bud, but except along and grasses & sedges form a green cover. The ground is wet and wet with numerous streams running over it. The meadows are alive with singing birds. Most common are Red-winged & Brewers, Blackbirds and Robins, but also present in good numbers are Spotted Towhees, Chickadees, Snipe, Starlings, and Junco Sparrows (?). A pair of Mallards foraged in the wet part of the meadow. A flock of Junco Finches perched in an adjacent Lodgepole Pine. Two Swallows (Cliff & Tree) flew over the meadow but too far away for positive identification. At 8 AM drove to Condola Lift (Squaw Valley Lodge) & rode lift (350') to its terminus on east slope of the ridge between Squaw Pk & Emigrant Pk. Wood Peckers sang from trees 100 yds below the upper Condola Lift terminus (White Fir, Lodgepole Pine). From here I snowshoed north to the top of a ridge at the point where Shirley Lake Lift terminates (it comes

R. E. Johnson
1967

Journal

2

May 21

Squaw Valley, Placer Co., California (cont.)

up the opposite side of the ridge. Lifts to this ridge were not operating (fortunately) and a quiet, snowy, beautiful wilderness spread in all directions (Gold Coast to Siberian lifts were operating in the main valley). Occasionally songs of single birds broke the silence. From 11:00-11:30 AM a Dusky Flycatcher, Mtn. Chickadee, Nuthatch (s.), Rosy Finch, & an American Osprey were heard from the scattered large trees (Red fir, White Pine, Hemlock). "Moose" tracks ^{in the snow} cross the ridge from south to north. To the north a ridge of peaks with cliffs that appear ideal for rosy track nesting could be seen (must be south of Donner Pass). I took 2 pictures of these: one with the normal (50mm) lens & one with the 350mm lens (F16, T20). Lake Tahoe shined like a big jewel to the east & south. The new hotels could be plainly seen on the SK corner (state line area) & I ~~took~~ took a picture of some snowy high peaks south of them. (F16, T20, ASA 64 — bright!). I also took a picture of the cliffs on the east face of Emigrant Pk & then I took off in that direction. A bare, muddy slope was exposed just south of the cliffs; the remainder of the Pk was deeply buried

R.E. Johnson
1967

Journal

3

May 21

Squaw Valley, Placer Co., California (cont)
with snow. On this bare section a number of birds fed along gurgling snow melt streams, snow edges, and in the mud. These included white-crowned sparrows, a Chipping sparrow, Oregon Junco, a Rain, and a Rosy Finch. Blue Grosbeak flew over on several occasions. On one occasion the rosy finch flew to a rocky area on the edge of the muddy area & chirped. I thought I also heard some young birds chirp. The bird flew away however toward the cliffs to the north. I searched much of the rocky area & located no nest or young.

Continuing upward & west I reached Emigrant Pk. Horned Larks were common, both in flocks of approx. 10 or as single individuals. One Winter Wren was seen at close range!! A picture ^{of the wren} was taken to the north at an unknown high distant peak. I can't imagine what it could be. Too pointed for Lassen, too close for Shasta, etc. It was located to the right of Granite Chief & to the left of the previously photographed pks.

On the ridge running south from Emigrant Pk. numerous Rosy Finches, Bluebird.

Journal

R. E. Johnson
1967

May 21

Snow Valley, Nevada, Lake (cont.)

M.C. Sparrows & lincs were seen. I took a couple quick pictures of ~~the~~^{the} ~~area~~^{area} ~~finch~~^{finch}.

A feather of a Green-tailed Towhee & many of a roky finch were found on top the ridge. A Clarke Nutcracker was heard on descending toward Gold Coast Lift. Three additional pictures were taken south toward the Pyramid Peak area (2 with 350 mm). Descent was made via snow shoes to Gondola Lift & then down the lift to the lodge.

R.E. Johnson
1967

Journal

5

May 27

Squaw Valley, Placer Co., Calif. - road gondola lift (#3.50) & then snow shod over wet but well consolidated snow to top of Shirley Lake Lift terminus, arriving there at 9:55 AM. Sun hot, bright; sky hazy (not clear like last week), still. To west of Lift top is the open patch of ground where many species of birds foraged last week (including rosy finches). The patch is now several times larger & nearly dry (~~had~~ been soggy wet with many little brooks running through it). A pair of rosy finches flew over going south & apparently coming from cliffs (~~on~~ N-E facing) on Emigrant Pk (photographed last week). A ^{Oregon} Junco foraging in the dirt & 2 Mtn. Bluebirds ~~at~~ landed briefly. A Wood Pewee landed on a rock & called once & then flew off low over the ground to the south (above timberline all the day). One Robin moves slowly over the area (on foot) eye balling in prey items in the dirt. Horned Larks could be heard to the west (Emigrant Pk) and a Mtn Chickadee was heard in the trees near to top of the Shirley Lake Lift. Marmot tracks cross the dirt in various places. An Audubon's Warbler forages in the low (4 inch) scrubby ground cover. A few rodent tunnels left from winter are melting out from under the snow.

Rosy Finch ♂ collected from northernmost rocky cliff

R. E. Johnson
1967

Journal

May 27

Squaw Valley, Placer Co., Calif. (cont.)

on Emigrant Pk. at 11:30 AM. It had been flying with one other bird. 3 other finches were seen on this cliff. Two of these were together as if paired & appeared to fly out from the cliff after a period of at least 10 min. of presence at the cliff (but out of sight). One Red-shafted Flicker on the snow margin nearby. The above cliff was never over 50 ft high (top down to snow).



Several White-crowned sparrows seen feeding on snow & dirt. A pair of Green-tailed Towhees seen in low (6") bushes 100 yds down west slope of pk. Mtn. Bluebirds common (often hovering in air), as are Horned Larks (flight song), Oregon Juncos, & Robins. One Golden-mantled Ground Squirrel seen on rocky ground north of Emigrant Pk top.

Two rosy finches feeding together near top of pk at snow margin, were collected (both ♂'s). 12:10 PM. Two Immature Golden Eagles circled over the peak. Once I thought I heard a Rock Wren down the west slope which is rocky & in places the snow had melted off. At ~~1~~ 1:15 PM another rosy finch was collected & another with it, flew off. I then traversed the ridge north & west

Journal

R.E. Johnson
1967

May 27 Squaw Valley, Placer Co., Calif. (cont.).

to Granite Chief Mtn (9006), an unnamed peak (8880 ft approx), and Needle Pk (8971 ft). From Emigrant Pk, these peaks look ideal for rosy finches (cliffs & snow) & they are higher than Emigrant (8774 ft) & Squaw Peaks (8885 ft), however as one approaches them it becomes clear that rosy finches are not as likely to occur there. The peaks are on an east-west ridge. The south slope receives more sun than major slopes of Squaw & Emigrant which lie on a North-south ridge, and it has little snow, no water, and is covered with low brush ($\frac{1}{2}$ to 1 ft). The north slope is deep in snow, covering whatever extensive cliffs that may exist. The snow is as loaded with insects as the snow on Emigrant Pk, so ^{insect.} Food probably isn't limiting. However because of this arrangement of the mtns, there are no areas where snowmelt causes extensive ^{areas of} moist ground & snow margins—these being favorite feeding places of the finches. The cliffs which are present have fewer fissures (nest sites) than the other peaks (however Needle Pk ~~is~~ is OK in this regard). The cliffs on the unnamed peak are directly under snow cornices which keep falling over the cliffs. These peaks are also a bit west of the main divide & may be a bit warmer on the

R.E. Johnson
1967

Journal

May 27

Squaw Valley, Placer Co., Calif. (cont.)

average. Horned Larks were not found on these peaks either since they offer little flat "tundra" type vegetation. Robins, Audubons Warblers, Juncos, White-crowned Sparrows, and Mtn. Bluebirds were common & 1 Clarke Nutcracker was heard (down the so. slope).

Returning to Emigrant Pk rosy finches were again spotted & one was collected at 4:40 PM & another at 5:05 PM.

On the ridge between Needle Pk & the unnamed peak a ^{old} nest was found on the ground, placed between large rocks (1 ft.² rocks). The ~~cap~~ cup of grass had an inside diameter of $3\frac{1}{4}$ inches & was $1\frac{1}{2}$ inches deep.

Pks further NW ^{on the ridge} look more barren & perhaps they have either rosy finches or horned larks. These peaks are not so high (eg. Lyon Pk, 8891 ft.).

I next traversed south to Squaw Pk. In the process I heard 2 rock wrens & at the top of Siberia Lift saw one rosy finch & a flock (5-7) of Cliff Swallows. I saw 2 other rosy finches on the sw slope of the peak & 2 (not together) on the snow above the cliffs on the ne face of the pk. I returned down via the ridge east from Squaw Pk

R.E. Johnson
1967

Journal

9

May 27

Squaw Valley, Placer Co., Calif. (cont.)

to the gap between KT 22 & Squaw Pks & then north downslope to Squaw Creek, then east to the Lodge at 7:30 PM.

Clouds piled in during the day & the wind came up (From W & NW) making it cool in the late afternoon.

Last week I saw no evidence of rosy finch pairs, this week - many finches in twos (pairs?). This time I heard no (perhaps one?) chirping by an adult that resembled young in a nest (heard this twice last time - each time being fooled into thinking a nest must be near, then searching the suspected spot & finding nothing). Rosy finches seem to have 3 kinds of notes: an "oink" (heard once), a hoarse chirp (most common), & the chirping that resembles young birds (probably courtship notes, etc).

Camped at Silver Creek Campground (USFS) on US 89 near Squaw Valley turn off.

R.E. Johnson
1967

Journal

May 28 Squaw Valley & Vicinity, Placer Co., California

Clouds which began to move in yesterday are now quite dark & threatening rain. I decided to stay in camp & put up yesterday's six rosy finch skins, as well as dry my boots, socks, etc.

In the afternoon I drove over Donner Pass to locate the beginning of tomorrow's hike to Castle Peak, then I drove back to Tahoe City & around the north end of the lake to the Mt. Rose Rd & up it to the road summit. The tops of the peaks were in the clouds. The distance from the road to Mt. Rose is only 3.5 miles, but the trail is covered so deeply with that it can't be located. I hiked to the top of a minor summit (9160 ft) ^{& west of} above the road summit. Most of the ground was snow covered but patches of gravelly volcanic soil showed here & there on south facing slopes. Low bushes grew in these spots. Oregon Juncos, White-crowned Sparrows, Mtn. Bluebirds, & a Mourning Dove were seen.

Camped again at Silver Creek Campground on US 89.

R.E. Johnson
1967

Journal

May 29

Castle Peak area, Nevada Co. California. Drove west over the new Donner Pass Rd to "Castle Peak area" off ramp (directly north across the highway from Boreal Ridge Ski Area) & parked. The road toward the peak was deeply snow-covered, however the snow was well consolidated & I did not take snow shoes. The road follows the west side of Castle Valley & ascends Castle Pass. Here I departed the road & walked east up the ridge to Castle Peak⁽⁹¹⁰³⁾. Much of the ridge was snowfree & rocky. The south slopes of Castle Peak have many large cliffs occurring in two major series. The lower series extend the length of the mountain (over a mile). Snow forms a solid carpet from their base on down to timberline. Only a few patches of snow remain above these cliffs. The uppermost cliffs are composed of 3 columns (I climbed each). There is no snow immediately below or on top of these. The north-east face of the peak is a cirque like wall culminating in the NE faces of the 3 above-named columns. Snow fringes the top of the cirque in most places and also fills it & extends down to tree line as a solid deep carpet. The cliffs look ideal for rosy Finches. Large numbers (50+) of Cliff Swallows were circling in the cirque & nesting on the NW face of the west-most column (at 9 AM). One rosy Finch flew out from near these nests & headed north toward Basin.

Journal

R.E. Johnson
1967

May 29

Castle Peak area, Nevada Co., California (cont.)
Peak (9015 ft.). Other species seen included Oregon Junco, Mtn. Bluebird, Clarke Nutcracker, Audubon Warbler, White-crowned Sparrow, Horned Lark, and Golden Eagle (all seen before 10 AM). Fresh Marmot tracks were abundant. Frost from the previous night (probably some precipitation) did not begin to melt until 10:30 AM due to cold air temps & a strong cooling wind. There was no free water until after 10:30 AM. Later small creeks developed from melting snow patches on the south side of the peak.

I next hiked the ridge north^{west} from Castle Peak to Basin Peak, $1\frac{1}{2}$ miles away. The ridge was dry & largely snowfree on the west slope & most of the top. Extensive snow begins part way to the bottom & covers the flat timberland below. The east edge of the top had a large cornice of snow running its full length & overhanging extensive deep snow fields covering the entire slope & basin below. Flocks of birds of two types were seen ^(on snow & dry ground) along the ridge: ① small (3-8) flocks of Horned Larks fed & flew together, unmixed with other species, ② mixed flocks — predominantly Oregon Juncos, but also White-crowned Sparrows, Audubon Warblers, & Mtn. Bluebirds — in groups of 10 to 20. A Rock Wren & a Red-shafted Flicker were heard down the west slope.

Journal

R.E. Johnson
1967

May 29

Castle Peaks area, Nevada Co., California (cont.)

Basin Peak has no cliffs, is large ($\frac{1}{2}$ to 3 ft.) rocky on the top & west slope, and snow-corniced on the east. Rosy Finches were observed as follows: ① 12 noon - 1 bird in flight on west slope. ② 1:00 PM - 2 birds - west slope.

③ 1:30 PM - one shot (♂) on ridge top feeding at snow margin just north of peak.

Two ^{Golden} ~~Bald~~ Eagles were seen while returning south along the ridge toward Castle Peak. One was soaring overhead and the second was on the snow in the basin to the east. He made several "barks" or yips while facing west (both toward me & the other eagle) & then took off. With binoculars I could see remaining fragments of some animal covering an area approx 15 inches square, with blood spots in the snow.

At 2:40 PM I was back on Castle Peak. The ^{NE} ~~face~~ face cliffs were in deep shade, water was dripping down over them, & few cliff swallows were seen. At 2:50 PM one rosy finch flew in from the north & landed on the cliff top briefly, then flew over the peak, continuing north (out of sight to me, so that I couldn't tell if it flew down the south face or north toward Donner Pass.

White patches (2-8 inches in diameter) occur on the tops of many rocks (urine? of some ;

Journal

R.E. Johnson
1967

May 29 Castle Peak area, Nevada Co., California (cont.)
rodent, ex. marmot?). These were surrounded by orange lichen. The ~~remainder~~ remainder of the rock was covered by black lichen & occasional patches of green lichen. The orange lichen only occurs around the white deposits.

A pika was heard calling in the rocks between the upper & lower set of cliffs on the south slope of Castle Peak at 3:50 PM.

In summary of the rosy finch situation. Very few were seen (5 sightings) on the two peaks. The only cliffs that appear occupied or occupiable are those on the ~~NW~~ face of Castle Peak. No rosy finches were seen among the lower south facing cliffs. Neither peak, nor the ridge between them, provided any sizeable areas of moist ground with small brooks of melt water and tender fresh sprouts of vegetation (locations of this type are common on Emigrant Peak & rosy finches commonly feed ~~there~~ at these sites). [Insects were abundant in the snow however.]
South ^{& west} slopes at high elevations are snow free & dry. North & east slopes are solid snow. Ridge tops receive little or no melt water, thus no moist ground, etc. This may be the factor most restricting the rosy finch on these peaks.

Journal

R. E. Johnson
1967

May 30 Sierra Buttes area, Sierra Co., California

I drove to Lower Sardine Lake last ~~the~~ night in order to scout out the climb of the Sierra Buttes. The road was open to both Upper & Lower Sardine Lakes since it follows the sunny north side of the canyon bottom. The slope above the road is nearly solid manzanita & is snow free. The opposite (north facing ~~&~~ slope) side of the canyon is timbered (open) & deep in snow. The Buttes are like giant ice cream cones dripping with an excess of luscious frostings (snow).

I decided to drive to Upper Sardine Lake & hike straight up the south facing slope (snow free) to the ridge top. On this part of the slope there are rock outcrops, mine dumps, & an old mine road which allow easy passage through the manzanita. ~~On~~ ^{On} the ridge top, I hiked west ~~then~~ to ragged cliffs, ^{& crags} which prevented rapid progress, so I descended ~~again~~ to Young America Lake, then back up to the ridge top west of the crags & hiked south to The Buttes.

At Lower Sardine Lake I heard a Great Horned Owl and saw, ^{& heard} Steller Jays, Robins, Wood Pewees, Olive-sided Flycatchers, Fox Sparrows, & Green-tailed Towhees.

Canyon Wrens were heard in cliffs above (no. of) Young America Lake and ~~also~~ also on the east facing cliffs of the main Butte below the Lookout Tower.

Journal

R.E. Johnson
1967May 30 Sierra Buttes area, Sierra Co., California (cont.)

At Young America Lake (Frozen) 2 ♂ Western Tanagers, several Mtn. Bluebirds, & several Oregon Juncos were seen.

A Rock Wren & a Flicker were heard from near the Lookout tower.

Rosy Finches were not heard or seen until reaching the Buttes themselves. Then they were seen only in a ~~the~~ big cirque east of the ridge (1st one north of Young America Lake) and on the cliffs below the Lookout (east face). Other similar habitat exists to the south on other Buttes in the series & rosy finches may occur on them also. The above mentioned cirque was descended via a snow ~~chimney~~ chimney on the sw, where steps were kicked in to the 45°-60° slope with cramponed boots. Four rosy finches were collected at 2:30 PM, 2:45 PM, 2:55 PM, & 3:15 PM. All were feeding on insects in the snow. Number 127 was paired & the other member of the pair was shot & injured, but escaped. They appeared to be nesting (?) on the south wall of the cirque in an outcrop surrounded by snow slopes.

On the return trip a Townsend Solitaire was seen at the upper end of Upper Sardine Lake.

In Summary, Rosy Finches seemed to

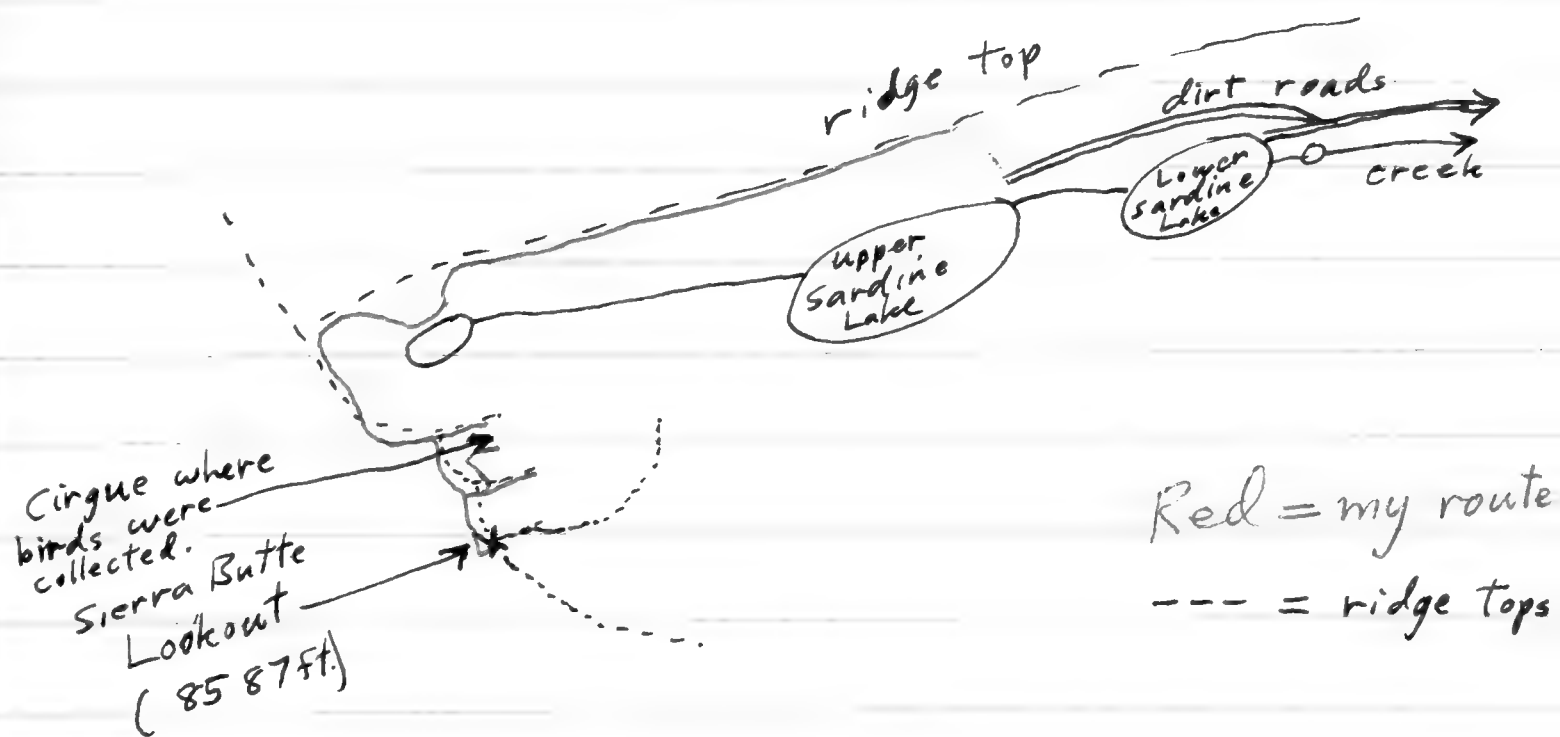
Journal

R.E. Johnson
1967

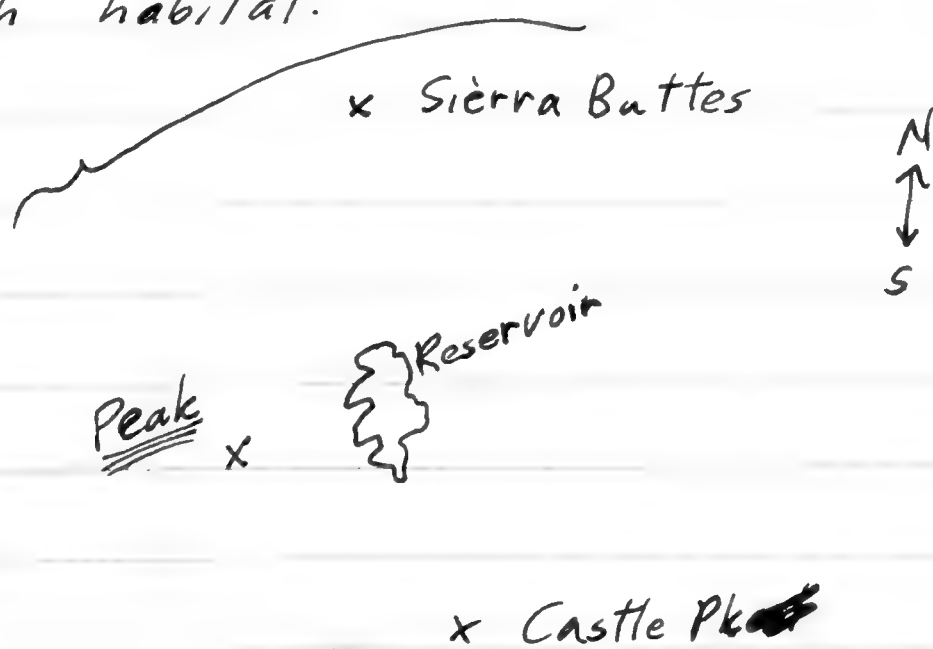
May 30

Sierra Buttes area, Sierra Co., California (cont.)

be fairly abundant on Sierra Buttes on the snowy, steep east faces of the highest parts of the Buttes. It appears that some are paired. Others were seen than those collected.



A peak south of Sierra Buttes could be seen that has abundant snow & north facing cliffs which appeared to be good rosy finch habitat.



x Castle Pk

Journal

R.E. Johnson
1967June 10 Mt. Shasta, Siskiyou Co., California

clear, sunny, warm at 9:30 AM. Drove from Berkeley, to roadside sleep stop just south of Castle Crags State Park last night (stopped after 1:30 AM). (left after 8:30 PM)

Drove this morning to Mt. Shasta city & then up the road to Ski Bowl on the SW side of Mt. Shasta at approx. 8000 ft. Ski Lifts (some rd. cuts are 10 ft.) are closed. Snow is several feet deep at this point. Timber is fairly open but continuous below 7500 ft. Scattered single trees occur up to half way up the ski lift. Robins & Clarke Nutcrackers occur around the ski lift parking lot and Cassin's Finches were seen around 7400 ft. Began hiking at ~~8~~ 9:50 AM with pack & shotgun. One Audubon Warbler sang and progressively moved up slope with me from tree to tree (White-bark Pines are scattered up a rocky ridge leading north & slightly east toward Sargent's Ridge. First breeze of the day was felt at 11:15 AM. A Golden Eagle circled over the snow far below at 11:30 AM. Rosy Finch chirps were heard east of Sargent's Ridge Top at 11:30 AM, when I first reached the ridge. Snow soft (sink in to knees) on that side of ridge. I was unable to locate the birds though I did hear them a second time after I had approached a small rock outcrop. Sargent's Ridge is ~~is~~ bare & rocky (rock volcanic, rough, and light in weight; rather light colored, i.e. gray) but both east & west slopes are deep snow. I've never been in so still a place. No wind, no birds, no mammals, no flying insects.

Journal

R.E. Johnson
1967

June 10

Mt. Shasta, Siskiyou Co., California (cont.)

There is something deathly about the silence. Occasionally a sound from civilization below (train) will drift up, otherwise its tomblike & sterile. Cumulus clouds have formed over Mt. Lassen to the south. and there is haze to the west. I've sat on the ridgetop beneath a peak ~~marked~~ 11,120^{ft.} approx.^{high} For $\frac{1}{2}$ hour & no sound of ^{rosy} Finches (the south face has cliffs). To the east the Mud Creek drainage can be seen. The snow pattern there and the soil (moraine) looks much more like it would produce good feeding areas than does this rocky area. 3PM and I just reached the top of the 11,120 ft peak. The ridge became quite difficult to navigate (class 4+ in places) with a Rety Pack and hand carried shotgun. This route is too ~~slow~~ for a summit assault. I've been feeling rather poor today & this may have slowed me up also. Not a single bird seen or heard since the 1st rosy Finch notes. On this rocky peak there are a few black spiders $\frac{3}{4}$ inch in diameter and a few small plants (I've only seen 14!). That's the total of life here! Dynamic! Thumb Rock and Konwakiton Glacier & the summit of Mt. Shasta can be seen from here quite well. Next, headed toward Thumb Rock (No.) to pass between it & the pk I was on. Noticed 3 backpackers ^(4:30 PM) headed this way following approx. the route of the chair lift. (They are almost to the top of it. I decided to descend from the

Journal

R.E. Johnson
1967

June 10

Mt. Shasta, Siskiyou Co., California (cont.)

pass to the east via Mud Creek instead of heading west + south toward the ski lift (either way is easily traversable) because Miller had collected his two rosy finches at the head of Mud Creek at a rather high elevation (10,000 ft.). A short ways down the canyon is terraced + flanked by old constantly crumbling moraines. The sound of falling rock is continuous + occasionally the sound of free flowing water can be heard (1st of trip). Snow Tables are common. ~~The~~ The snow surface is littered with rock. A Rosy Finch was heard (4:45 PM) chirping somewhere in or near a cliff of moraine ^{on the} south ~~side~~ side of the canyon. It finally flew over head (to north) and disappeared above moraine on that side. That was the 1st bird I've seen or heard in over 5 hrs! On the snow at this location I found a bunch (30+) black feathers with a slight greenish irradescence — look like blackbird tailfeathers + primaries. Later I found a frozen White-crowned Sparrow in the snow. I continued ^(behind me) down canyon to approx. 9600ft, then ^{5:30 PM.} heard a Rosy Finch _{on} on one of the moraine cliffs on the sw ~~side~~ wall of the canyon. I returned up canyon but the bird flew across canyon above the moraine cliffs on that side. I ascended the sw wall which is constantly avalanching + is thus nowhere "safe" to ascend. The wall ~~was~~ had been shaded for some

Journal

R.E. Johnson
1967

June 10

MT. Shasta, Siskiyou Co., California (cont.)

time and had stabilized somewhat. Most of the avalanches seem to begin from materials released by the melting snow or from moraine material loosened by snow meltwater. The canyon does not appear safe to descend from either side for several miles due to these loose moraine walls which never stop avalanching. Entry from the head of the canyon (where I entered) is safe but a lot of work to get to. I circled back to the ski lift & my faithful VW, arriving at 7:15 PM. An Oregon Junco sat on the railing of the resort building.

[Ski Bowl is reached by a 15 mile long paved 2 lane road which begins in MT. Shasta City. Apparently under all the snow at Ski Bowl is Panther Meadow! You'd never guess it. Dr. Miller apparently camped at the meadow for a week in July of 1939.

Will spend the night at McBride Spring Campground (USFS) located up the Ski Bowl Rd about 4 miles from MT. Shasta City. Camp is in trees, has tables, toilets, piped & stream water, stoves, etc. Room for about 8 parties (6 now occupied).

June 11

MT. Shasta, Siskiyou Co., California

clear, warm, still. 7:55 AM. Will snowshoe ^{east} this morning from Ski Bowl to Mud Creek to try to find Miller & Merriam's

Journal

R.E. Johnson
1967

June 11

MT. Shasta, Siskiyou Co., California (cont.)

Rosy Finches. A Clarke Nutcracker is raiding a Ski Bowl Trash can. 9AM heard & saw Rosy Finch a rocky area protruding through snow on head of Squaw Creek. Followed it downhill to SW to rock outcrop overlooking Ski Bowl. Two other Rosy Finches also flew the same direction. Another seen where I saw the 1st one while I was elsewhere (naturally). Another flies east cross-slope in the direction I was originally headed (Mud Creek). Several other non-directional chirps heard. Clouds moved in about 9AM & now 10:30AM are like a fog at this altitude (9300ft.) making visibility 40ft. At 11:00AM spotted 2 Rosy Finches on low cliff which faces west & is part of a rocky N-S ridge protruding from the snow. Collected both birds: ① the ♂ appears to be littoralis (gray down sides of head below eye & under chin. More gray than Miller's two specimens), ② ♀ appears to be dawsoni (no gray below eye). This means both races & ~~an~~ apparent hybrids occur here. Clouds lifted, sun coming through (12:00 noon). Mtn. Bluebird flew up-slope past me. Several other Rosy Finches have flown over while I've been writing notes. Usually they make the hoarse chirp note, but once this morning I heard the "oink" note and once I heard a bird who had ~~just~~ just landed apparently to feed give the chirp & oink(?) in couplets: "chirp-oink; chirp-oink; etc". One⁽²⁾ of the two birds collected was inspecting the cliff face (entering all holes & cracks), perhaps for food

Journal

R.E. Johnson
1967

June 11

MT. Shasta, Siskiyou Co., California (cont.)

but could also be for nest site. I wasn't able to follow the other birds activities. Cliffs are 30 ft high, partially overhanging, & full of crypts & holes at the point where the Finches were collected. Snow extended to the base of the cliff except in a few spots which has patches of Creeping Juniper growing. Several $\frac{3}{4}$ " black spiders & some small ants were seen on the rocks. Continuing east across the snow 200 ft or less and a flat snowless area appears. It is the only area I've seen with any kind of turf (30% or less ground cover of grass) & the only area where a bird could feed in moist ground along the snow edge. A chipmunk was seen on an outcrop in this area. Another N-S outcrop ridge occurs 200 ft to the east & several Rosy Finches have been seen on it & one collected at 1:15 PM (*littoralis* ♂). It had just finished a non-vigorous chase of another male. Its movement up and down the rock ridge both during & after the chase ~~was~~ suggested territorial behavior centered on a definite piece of ground. Several other Rosy Finches seen higher up the ridge. Ridge has low (1-2 ft.) white-bark Pine growing on it in patches. 3:15 PM - collected a Rosy Finch (♂ - *littoralis*) singing from the top of a high rock upslope from previous bird. I had observed that every 30-40 min. a bird flew over the rock from the west (flying cross-slope) & disappeared into the Mud Creek Canyon. Five minutes later a bird would fly up from the

Journal

R.E. Johnson
1967

June 11

Mt. Shasta, Siskiyou Co., California (cont.)

canyon and land on the rock & sing loudly (all chirps, no oinks) for at least 5 minutes & then fly east. I, therefore, stationed myself near the rock. A bird flew over going east after I'd been watching 35 min. Shortly a bird appeared from the east & I collected it, as noted above, at 3:15 PM. Beneath this rock on the ground were a large number of feathers of a fairly large bird. Either the bird was carried there by a predator or lived here because the number of feathers ($50 \pm$) were too many to have arrived in one place by wind action. The feathers were collected since so few species seen to occur here.



2 inches

 $4\frac{1}{2}$ inches

dark brown
feather with
numerous tan
markings.

 $3\frac{1}{2}$ inches

tan

at 3:40 PM a Rosy Finch appeared on a rock below to the se on the tip of Mud Creek Canyon. It chirped.

R.E. Johnson
1967

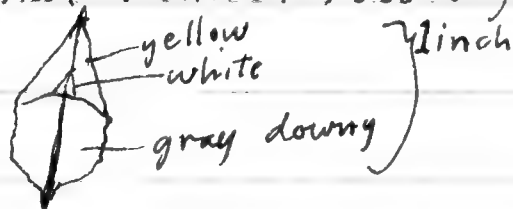
Journal

June 18 MT. Shasta, Siskiyou Co., California (cont.)

loudly for some time, then flew onto the snow or dirt (couldn't see). Shortly it flew ^{west} to same rocky ridge where I had collected 2 previous birds, ^{but downslope} & worked its way upslope to point where last bird was collected, singing from the highest outcrops as it went (flying between locations). I collected it ^{at 3:55 PM} while it was chirping from the same high outcrop as the previous bird. It is a ♂ littoralis also.

There appears to be a general pattern of movements on this s. facing slope. Birds appear to fly cross-slope E-W and occasionally up & down rocky ridges before moving on cross-slope. The pattern & timing suggests the birds may be feeding to the west on the so. facing slopes & nesting in Mud Creek Canyon, since they would appear to spend little time in the canyon compared to on the slopes.

Another Feather found, probably from an Audubon Warbler.



Two other feathers with a fine pattern of brown & white throughout. Two inches long. Fine soft texture.

No additional birds appeared between 3:55 PM & 5 PM and I returned via the route I had come without seeing any other birds. I was met by an unhappy ski lift operator who informed me that I had broken the law. Turns out you can't climb Mt. Shasta without registering according to county ordinance. They (don't know who that

R.E. Johnson
1967

Journal

June 11

Mt. Shasta, Siskiyou Co., California (cont.).

includes) got my name & address and were also concerned about the gun. I showed him my permit. Civilization's strangle hold is becoming too much. You can't breath fresh air without a permit.

In two days I have only seen a rosy finch feed on the snow surface once & that briefly. The snow seems to be nearly devoid of insects.

R.E. Johnson
1967

Journal

June 17

Berkeley to Warner Mtns, California

Left Berkeley at about 10 AM and drove via Vallejo, Vacaville, Winters, & Redding, then via Calif. Hy. # 299 to Alturas and Cedarville. At approx 5 PM it rained in Canby. I arrived in Alturas at 5:30 PM. I decided to approach the mtns from the east side because ~~that~~ side is steeper & better drained and therefore approach roads would more likely be dry. This notion proved correct and I was able to drive to the top of the range via this ~~route~~ side. Deep Creek road^(dirt) turns west from the paved road at a point approx 1½ miles south of Cedarville. This road was followed (but ~~not~~ the No. Fork Deep Creek branch of this road) all the way to Granger Creek (14 miles of dirt road) divide. Here the road split. It was not possible to drive all the way to Tom Lee Meadows (east or left road fork), but the road was clear ~~to~~ past Porter Reservoir to the Summit Trail (right fork of road). I set up camp at the end of this^{latter} road, packed my pack for a 3 day stay on Warren Peak, and collected^{8:20 PM} & skinned one Mountain Bluebird which was perched on top a 60 ft. dead fir tree. It sang "tik-youk" at close intervals.

An Oregon Junco was flushed^{at 7:15 PM} by my car from a roadside nest which faced east & was under a small, open Current Bush. The nest contained 4 blue eggs with red-brown speckles, which tended to form a band around ~~the~~ each egg at the widest part of the egg.

June 18

Porter Reservoir to Warren Pk via Summit Trail, Warner Mtns,

Journal

R.E. Johnson
1967

June 18

Modoc Co., California - clear, warm, still
at 7:45 AM

Left camp & hiked summit trail to crossing of headwaters of Middle Fork Parker Creek on nw side of Squaw. Most of the country along the ridge top is above timberline. Junipers & Curl-leaf Mahogany dot the west slopes. Ground cover is primarily lupine, sage, & phlox. Very rocky (mostly 4" to 3").

Birds noticed include: Horned Lark, Mtn. Bluebird, Rock Wren, Hermit Thrush (west slope timber), Oregon Junco, Dusky Flycatcher (with 3 notes variously grouped, including final uprising note), & Robin.

Trail around west side of Squaw Pk in timber is deeply (3-6 Ft) covered with snow. I circled higher up peak and missed most of it. Most of ridgetop south of Squaw Pk is clear of snow. Small pieces of chert & obsidian were found. Camp was set up at a spring below the trail, east of the ridge and $\frac{1}{2}$ mile nw of Cottonwood Lake at 8480 ft. approx. Violet-green Swallows were diving about at the ridgetop above camp at 11 AM and a Robin & Stellar Jay were seen. At 11:30 AM the sky was black overhead & to the N, S, & W, but clear to the east. Rain & Hail began at 11:30. Hiked from camp below east facing cliffs and above Cottonwood Lake. Ascended Mtn on divide between Cottonwood & Patterson Lakes. Snow (1-6 Ft) & low (4-10 Ft) forest (White-bark Pine) - on top & west slope (gradual) of Warren Peak. I sat and listened for rosy finches at various points at

Journal

R.E. Johnson
1967

June 18

Warren Peak, Warner Mtns, Modoc Co., California (cont.)

the top of the cliffs, but not the slightest indication of them. Perhaps the forest on top indicates that conditions (temp, etc.) are too warm or etc. for rosy finches. The habitat reminds me very much of the Purcell Mtns of NW Montana where I was unable to find rosy finches. In both cases the cirques & cliffs were big & snow was abundant, but trees reached the tops of most peaks from one side. ^{Rock Wrens occurred in both} The tree cover areas also, suggesting a dry climate. not only may indicate climatic conditions but it prevents the slope which it occupies from serving as a feeding location for finches. Warren Peak is very warm today in spite of black clouds above. It was also warm in camp last night at a lower elevation. This sort of temp in June may be prohibitive for rosy finches.

The cliffs are alive however. Violet-green Swallows are circling around them in considerable numbers.

Mtn. Bluebirds are common among the cliffs.

One pair of Oregon Juncos was seen, one member was picking up nesting material on the cliff. One Clark's Nutcracker was seen flying below the cliffs. One Rock Wren was heard singing half way down the cliff and later from boulders just sw of the top.

The snow does not appear to have many insects, however many have lit upon me as I write these notes on top of Warren Peak. The view is great. Goose Lake, Alturas, the 3 Alkali Lakes & a

Journal

R.E. Johnson
1967

June 18 Warren Peak, Warner Mtns, Modoc Co., California (cont.).
 dozen other lakes, Mt. Shasta, Cedarville all
 plainly visible in spite of clouds. Unfortunately
 I left my camera at the tent due to the
 rain, etc. Patterson Lake is entirely frozen over
 but the ice is cracked a bit near the outlet.
 Dusenbery Peak (9097) & associated peak to west of
 it (9121 ft.) look much like Warren Pk (snow, low
 trees on west slope, cirque on ne face), but lower.
 The ridge between Warren & #9121 is mostly
 clear of snow & meadow occupies the upper
 west slope. I will check this out shortly.
 Eagle Peak is slightly higher ⁽⁹⁸⁹²⁾ than Warren ⁽⁹⁷¹⁰⁾, but
 appears to be wooded on the north & west
 slopes. There may be cliffs on the east face
 however. ~~that is~~ ^{It} is snowier than Warren, but
 more wooded. It doesn't appear any more suitable
 for rosy finches than Warren Peak. Leave Warren
 Peak to head south toward Dusenbery Pk at 3:15 PM.
 [Chipmunk & many lady bird beetles on
 Warren Peak.

Ridge toward Dusenbery Pk is quite dry,
 rocky soil, & 50 ± % ground cover of small plant
 cushions. Some of these are Phlox (pink or white flower) &
 grass. Others unidentified. Many Mule Deer tracks.
 Many scats of Coyote (?) - bleached white, filled with
 bones & hair. Pocket Gopher runways also common.
Rock Wrens & Oregon Junco (singing trill) were common.

Journal

R.E. Johnson
1967

June 18

Warren Pk, Warner Mtns., Modoc Co., CaliforniaRobin, Mtn Bluebird, & Clarke Nutcracker also

present. No birds were seen on the open ridgetops & "meadow" on the west slope. All were in trees below ridge or on rock outcrops. Walked south to point 9053ft (nw of Dusenbery) & returned. Cliffs to east of ridge appear adequate for rosy Finch nesting (ie cliffs + snow) & have abundant melt-out areas below for feeding. However the elevation is probably too low.

Conclusion regarding rosy finches: None found on Squaw Pk, Warren Pk, ridge south of Warren to pt. of elevation 9053 Ft. Dusenbery Pk looks no better (is lower) and Eagle Pk appears to have less cliff area. Presence of trees & rock wrens on top of peaks may be indicator that climate is wrong for rosy finches.

Dusky Flycatcher sings "du-hic" song from top of White-bark Pine tree near Cottonwood Lake at 7:15 PM. Another sings "du-hic" song from tree top near camp. It would sometimes sing "du - du - du - du - du-hic" and once it sang "hic" several times in sequence. A White-crowned Sparrow was heard near camp at 8:45 PM. Bats flying around tent at 9:00 PM. Still fairly light, but too bed anyway.

R.E. Johnson
1967

Journal

June 19 Warren Peak to Porter Reservoir, Warner Mtns, Modoc Co., California. - clear, warm, slight breeze.

Rained several times last night but cleared by morning. Western Wood Pewee heard near camp at 6AM. Also heard: Robin, Dusky Flycatcher, Rock Wren.

On ridge above camp heading north toward ^(between Warren & Squaw Pks.) car, Green-tailed Towhee singing from tops of sagebrush. W.C. Sparrow, Oregon Junco, Mtn. Bluebird. Pika in rock slide on west slope. A Badger crossed trail not noticing me. Mule Deer tracks are common and one 2 point buck in velvet approached to 20 ft of me on trail before noticing me & running off.

On west slope of Squaw Peak the trail passes through a White-bark Pine Forest & here I collected a Dusky Flycatcher ^{at 8200 ft.} from the top of one of the trees ^{at 8:30 AM.} It had been feeding & singing 3 notes in various sequences including the upturned note. A Cassin's Finch sang "where are you" over & over from pines in an open part of the stand.

at n. edge of pine stand is a cool creek. From there on north the vegetation is low mats of herbs & grasses until the trail drops into Juniper & Mahogany ^{at 7500 ft.} on the w. side of the ridge. In Juniper area, ^{at 10:30 AM.} 2

Dusky Flycatchers were collected, from the tops of White Fir trees overlooking ~~Juniper~~ Sage. Both sang

Journal

R.E. Johnson
1967

June 19

Warren Peak to Porter Reservoir, Warner Mtns, Modoc Co., California (cont.)

all 3 notes in various order. One bird has a larger bill than the other. It sang from scattered firs (20-40^{high} ft) more "within" the brush field. The other bird sang from the tops of taller firs (70 ft) in a denser stand bordering the brush. The birds appeared to be on adjacent territories. A bird with similar song was singing to the south of these 2 and one singing "du-hic" was heard to the north. Neighboring species included Cassin's Finch, Oregon Junco, numerous Green-tailed Towhees, occasional Red-breasted Nuthatches (never seen). A Red-tailed Hawk & a smaller Buteo glided to the west high overhead.

11:15 AM Dusky Flycatcher collected from top of 50 ft. White Fir in a dense patch of same. Bird sang all 3 notes. Bird didn't fall to ground, therefore had to climb limby tree. Ugh! 7,200 ft.

12:00 noon Dusky Flycatcher. Sang all 3 notes from top of 30 ft dead snag at edge of dry desolate area, & from 15 ft Juniper (one of few trees in barren area). Collected (2 shots). 7080 ft.

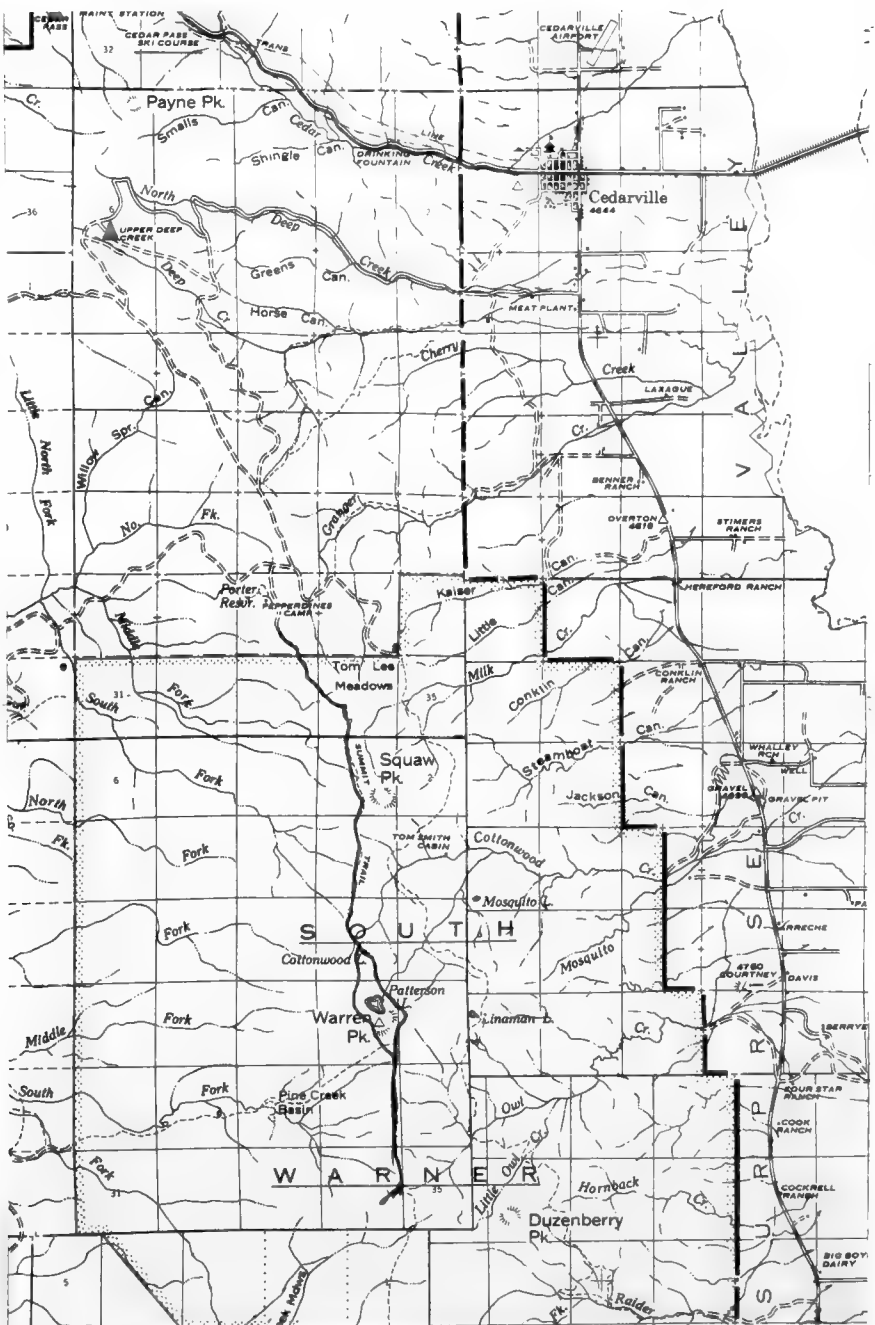
12:30 PM Back to car & meadow. A pair of Williamson's Sapsuckers nesting in Aspen snag in meadow over creek & False Halebore. Nest is 15 ft up & facing north. 6800 ft. $\frac{1}{4}$ mi. SE of Porter Reservoir. Collected both parents, while they were feeding the young ants.

Journal

R.E. Johnson
1967

June 19 Warren Pk to Porter Reservoir, Warner Mtns, Modoc Co., California
 Small toad picked up in creek by car, $\frac{1}{4}$ mile se of
 Porter Reservoir.

June 19 South Deep Creek, 7100 Ft, Warner Mtns, Modoc Co., California
 2 Mtn. Bluebird nests with adults feeding young,
 both located within 10 Ft. of creek in meadow in
 east facing holes in Aspen Trees 10 + 15 Ft above the
 ground. A male Western Bluebird attempted to enter
 one hole but a male Mtn. Bluebird approached & apparently
 prevented him. It (western) then perched 6 Ft. from the
 hole and the Mtn. B.B. flew away. Five minutes later
 the western also flew away. Other birds seen:
Robin, Chipping Sparrow, Flicker sp., Oregon Junco.
Moose tracks.



Journal

R.E. Johnson
1967

June 19 Warren Pk to Porter Reservoir, Warner Mtns, Modoc Co., California
Small toad picked up in creek by car, $\frac{1}{4}$ mile se of
Porter Reservoir.

June 19 South Deep Creek, 7100 Ft, Warner Mtns, Modoc Co., California
2 Mtn. Bluebird nests with adults feeding young,
both located within 10 Ft. of creek in meadow in
east facing holes in Aspen Trees 10 + 15 Ft above the
ground. A male Western Bluebird attempted to enter
one hole but a male Mtn. Bluebird approached & apparently
prevented him. It (western) then perched 6 Ft. from the
hole and the Mtn. B.B. flew away. Five minutes later
the western also flew away. Other birds seen:
Robin, Chipping Sparrow, Flicker sp., Oregon Junco.
Moose tracks.



Warner Mtns

hiking route marked in red

Journal

R.E. Johnson
1967

June 24 Berkeley to Crater Lake National Park, Oregon
An uneventful hot drive through the central Valley of California. Scattered clouds over the Cascades. Crater Lake had less snow than usual this year but most of it came late, thus a little more snow than usual at this date. The only campground open is Mazama Campground just outside the south entrance station (7 miles from Rim Village & the lake). Even this campground is still buried in 2 ft of snow, the water is off, & the restrooms are locked. Garfield Pk (8060) is largely clear of snow & will be easily accessible from Rim Village (1.7 mi by trail).

June 25 Rim Village to Garfield Pk & Vidoe Ridge, Crater Lake National Park, Oregon bright sunny day, a few hazy clouds, still. Considerable snow over trail near top of Garfield Pk so that trail could not be followed. Trees come within a few feet of the top of the peak on the so, w, & e. Steep cliffs & snow lead down the no. face to the lake. Clarke Nutcracker and Red-shafted Flicker were seen on the west slope of the peak. To the east is a gently so. sloping meadow, 75% snow covered, and dotted with clusters of white-barked Pine. Cassins Finches sang from the trees ("where-are-you") and Mtn Bluebirds, Robins, Oregon Junco, & Chipping Sparrow fed on the meadow. A Rosy Finch sang (chirps +

Journal

R.E. Johnson
1967

June 25

Garfield Pk, Crater Lake National Park, Oregon (cont.)

oinks) From a tall (40ft) snag in a patch of pines (20ft). It joined a second bird & fed on the meadow briefly. I shot at the 2 (side by side), feathers flew & so did they! No specimens.

Another(?) Rosy Finch landed in the top of a distant tree. One collected at snow border 100ft south of Dyar Rock at 11:00 AM. Several seen on rock outcrops of cliffs below north face of Rock. Two collected at snow border 100 ft. south of Dyar Rock at 12:30 PM. Several others seen, occasionally, singing from top of a tree. One seen on cliff had exceptionally red looking breast feathers.

Audubon Warbler on Dyar Rock. Six Rosy Finches collected between 12:30 & 1:30 PM 100 ft. south of Dyar Rock. Many others seen. Total of 9 collected at this location.

One Violet-green Swallow fly past Dyar Rock. Golden-mantled Ground Squirrels & a Pika were seen on the west slopes of Garfield Pk.

A Winter Wren sang beside ^{Goodbye} ~~Manson~~ Creek and a Dipper fed within it. above the road at a picnic area. Stellar Jays scavanged around the tables at 8 PM.

This morning at 5 AM a Pygmy Owl called from above my camp in Mazama Campground. I attempted to call it ^{or down} in, but finally gave up & went back to sleep.

R.E. Johnson
1967

Journal

37

June 26 Crater Lake National Park, Oregon

Bright sunny day, scattered hazy clouds.

Spent morning with Mr. Bruce (Chief Park Naturalist) and Dick Brown (Park Biologist) at Park Headquarters.

see
attached
sheet
titled
"specimen
data"

Mr. Brown indicated that he had collected 5 Rosy Finches on the snow fields se. of Rim Village Lodge in May¹⁹⁶⁶ (?) to be used in a display at Mt. Rainier National Park. I then looked over the snow fields mentioned (noon) and found no Rosy Finches, but they may occur there. Many patches of bare ground are exposed and they look as though the area will be more xeric than the higher area near Dyar Rock where I collected yesterday. There do not appear to be many insects on the snow at either location & it may be significant that, as yet, no Finches have been observed feeding on the snow, but only at snow margins.

We also looked in the Crater Lake collection & located 3 of the 4 specimens (#'s 417, 289, 291) mentioned in Farner's "Birds of Crater Lake National Park". A specimen at Sinnott Memorial Lookout at Rim Village (collected at Vidoe Ridge) is apparently # 290 (couldn't see the # on the label). Mr. Brown volunteered the use of the NPS Freezer and lab to do my work. This I gratefully accepted, especially the lab since the ~~few~~ mosquito-eater niche does not seem to be filled in this park.

Dick Brown accompanied me back to Dyar

SPECIMEN DATA

- ① Oregon, Klamath Co., Crater Lake National Park, Rim Village;
open pumice meadow immediately southeast of Crater Lake Lodge,
feeding at edge of melting snow.

Coll.: George B. Henley and Richard McP. Brown, 3 May 1966.
Shot with a 410 shotgun, using #9 shot, at about 40 feet.

Gray-crowned rosy finch (♂)
Leucosticte tephrocotis littoralis Baird
det.: Richard McP. Brown, 3 May 1966

- ② Oregon, Klamath Co., Crater Lake National Park, Garfield Peak
Trail; a few feet past first small talus slope, feeding at edge
of melting snow.

Coll.: Marvin C. Hershey and Richard McP. Brown, 17 May 1966.
Shot with a 12-gauge shotgun, using #00 buckshot, at about
40 feet.

Gray-crowned rosy finch (♀)
Leucosticte tephrocotis littoralis Baird
det.: Richard McP. Brown, 17 May 1966

- ③ ④ Oregon, Klamath Co., Crater Lake National Park, Rim Village;
open area immediately east of Crater Lake Lodge and south of
paved portion of Garfield Peak Trail, feeding at edge of snow.

Coll.: Richard McP. Brown, 31 May 1966. Shot with a 12-gauge
shotgun, using #8 shot, at about 35 feet.

Gray-crowned rosy finch (♂)
Leucosticte tephrocotis littoralis Baird
det.: Richard McP. Brown, 31 May 1966

- ⑤ Oregon, Klamath Co., Crater Lake National Park, Rim Village;
open area immediately east of Crater Lake Lodge and south of
paved portion of Garfield Peak Trail, feeding at edge of snow.

Coll.: Richard McP. Brown, 31 May 1966. Shot with a 12-gauge
shotgun, using #8 shot, at about 35 feet.

Gray-crowned rosy finch (♀)
Leucosticte tephrocotis littoralis Baird
det.: Richard McP. Brown, 31 May 1966

Specimens Collected at Crater Lake by Dick Brown

38

Journal

R.E. Johnson
1967

June 26

Crater Lake National Park, Oregon (cont.)

Rock starting after 3 PM. On arrival we did not find any Rosy Finches along the snow margins. Perhaps this was because we did not wait long enough or perhaps it was related to the time of day. Dick identified several species of plants from me on the meadow below Dyar Rock, a meadow he refers to as a "pumice" meadow.

These include Phlox, Polygonum,
Eriogonum marifolium, Phacelia

A Mtn. Bluebird (♂) was collecting nest material (grass) along a snow margin within 10 ft. of 2 ♀ Cassin's Finches. Dick remarked that the pumice type meadows have no more than about 14 species of plant on them (including grasses & sedges). He returned to the cars leaving me behind to wait for the Finches which appeared as soon as his back had turned. They landed in the shady east face of Dyar Rock. One dropped to the ^{ground by the} snowbank on the crest of the ridge in the shade of the rock. I collected it & found that approx. a dozen were on the north facing cliff of the rock which is rotten rock extending over 100 ft below where I was standing. I finally decided to collect some & hope to retrieve them on the cliffs. I shot 3 & retrieved them all but one had a bloody head from the fall. Retrieving them turned

Journal

R.E. Johnson
1967

June 26

Crater Lake National Park, Oregon (cont.)

out to be as hair-raising as it looked because everything wanted to roll, slide, or break off in my hand. All were males & the remainder of the flock also appeared to be males.

Until I shot them they had all sat quietly in the shade spaced ~~from~~ 5 ~~ft~~ or more ft. apart. However when I shot one that fell below another flew along with it chirping. ~~2~~ Shortly 3 were chasing each other back & forth in the vicinity of the dead one. This gave the impression that one may have been trying to protect the dead bird (actually it was injured but alive & upright) from the others & suggested all were males except the injured one. However one of those fighting, as well as the injured were collected & all were males. No such fuss occurred over another bird that was killed outright & only fell a short distance. Perhaps the lower location is close to a nest? However the injured bird was never attacked by the others. Conclusion uncertain. Didn't get all birds back up cliff until 6 PM.

Chipping Sparrows trill from trees near meadow at 6:15 PM. Golden Eagle soared across ~~the~~ north face of cliffs of Garfield Pt. A Robin feed on the meadow 30 ft upslope in a dry location.

Journal

R.E. Johnson
1967

June 26

Ceanothus prostratus (Square Carpet), Steershead Bleedingheart (Dicentra uniflora), & Western Pasqueflower (Anemone occidentalis) are common on Garfield Peak (in bloom).

June 27

Hillman Pk (8156 ft), Crater Lake National Park, Oregon
clear, sunny. 8-10 AM. Saw 2 Rosy Finches at different times at 7800 ft, each sitting on a white-bark Pine top over snowfields overlooking Crater Lake. Audubon Warbler & Cassin's Finch also seen. A Yellow-bellied Marmot was sprawled out on the grass in the shade of a tree.

Spent remainder of day putting up 9 birds from previous 2 days collecting.

June 28

Garfield Pk to Vidoe Ridge, Crater Lake National Park, Oregon
7:40 AM, clear, warm.

Several Rosy Finches in tree tops at bottom of east slope of Garfield Pk. Group of approx. 6 Rosy Finches feeding at snow margin near Crater Lake Rim on west slope of Applegate Pk (top = 8135 ft) at 7850 ft at 9:30 AM. Three were collected, 2 ♂'s & 1 ♀. The ♀ was shot first. One male flew over to her & lit on top with wings fluttering & remained for approx. 15 sec. in an apparent attempt to copulate. I could not see the ♀ well enough to tell if she were still alive. The male then turned and chased a nearby (5 ft.) ♂ a short distance (10 ft) and then returned slowly while feeding and copulated again. He was then shot & both

Journal

R.E. Johnson
1967

June 28 Garfield Pk to Vidoe Ridge, Crater Lake Nat. Park (cont.)
 individuals were retrieved. The ♀ was lying face down on a relatively level spot & may have suggested a crouching ♀. A third male Rosy Finch of this group was then collected. The above situation suggests that the activities observed on the face of Dyar Rock on June 26 involving falling dead or dying birds may(?) also be explained in terms of copulation & associated displays. A dead bird facing downward, even though a male, elicited a similar defense by another male even though no copulation took place. The falling fluttering bird may have suggested some portion of the ♀ mating display since the other male followed closely with evident interest.

Near this same spot, a Fox, 2 Deer, & a Red-breasted Nuthatch were seen prior to 10AM. The beaks of the 2 ♂ Rosy Finches (above - collected) were muddy.

A Rosy Finch chirped from a white-barked pine tree top overlooking meadows. It then sat quietly looking about. Twice it pecked at ^{or nipped} the needles on which it was perched. I Clarke Nutcracker approached & landed on the same perch. The Rosy Finch flew off before the Nutcracker landed. It flew 100 yds & lit in another tree top where it sat quietly, changed perches once, pecked at the needles several times & then preened for several minutes. It then flew to a

Journal

R.E. Johnson
1967

June 28 Garfield Peak to Vidale Ridge, Crater Lake Nat. Park, Oregon (cont.)
lower limb chirping & disappeared (probably flew off). Shortly a bird (same?) approached the same area & landed to feed at a snow margin where I collected it at 10:30 AM (♂).

Another ^(rosy finch) bird was observed hopping from upright limb tip to limb tip pecking at needles. There were numerous insects flying around it but it did not flycatch.

Two birds ^(rosy finches) were observed at 11:15 AM on the cliffs on the no. face of Applegate Pk. They were facing each other with bodies very erect & breast out. The one most conspicuously in this posture fly up, hovered over the other & relanded. It then ~~fly~~ flew down from the rock to a lower spot with its wings partly spread & tail up at 45°. The behavior of the two birds suggested both hostility & mating. It appeared that the displaying bird was chased prior to the display. Both birds gradually moved down the cliffs, always the same bird leading & occasionally displaying. No sounds heard, but the birds were considerable distance away.

^(rosy finch) A bird flew up from the no. face rim cliff face and lit in a tree, then flew to another & sang high inquiring (uprising) chirps, then suddenly a rapid series of hoarse chirps with a higher overtone as if excited. It then flew to the ground to feed.

Journal

R.E. Johnson
1967

June 28 Garfield Pk to Vidae Ridge, Crater Lake Nat. Park (cont.)
1:30 PM - pair collected at snow edge by Dyar Rock. Male most wary. Another ♂ collected from tree on Rim west to Dyar Rock.

June 29 Dutton Ridge, Crater Lake Nat. Park Oregon
Obtained permission to go through locked gate on Rim Highway (open to public on July 1) + then explored the ridge from 9 AM to 1 PM. Ridge is scattered clumps of trees on open pumice meadow south & s.e. slopes. Large snow patches remain which form 80% of the ground cover. Slopes have a very dry appearance. No Rosy Finches were seen or heard either at snow margins or on the extensive cliffs overlooking the Lake. The area differs little from Dyar Rock area, but is lower (max 8150 but most open areas are well below 8000 ft. & down to 7300 ft) on the average (but has a number of areas as high or higher than near Dyar Rock) & dryer once the snow has melted. These differences are almost unreal & I can't believe they can be too important. Perhaps the finches feed elsewhere during the heat of the day or? Farmer ~~had reported them~~ has listed a number of records & specimens from Dutton Ridge.

One Horned Lark was seen on the turf at 7900 ft. Farmer reports it from Crater Lake only on the

Journal

R.E. Johnson
1967

June 28 Dutton Ridge, Crater Lake National Park, Oregon (cont.)
basis of his records from Lho Rock.

June 29 Mt. Scott, Crater Lake National Park, Oregon (8926)
This is the highest peak in the park, but it lies ^{2½ miles} east of the Rim and apparently has a somewhat different microclimate. Most of the mtn is timbered, but there is a west or nw facing cirque of scree with a few No. facing cliffs and lots of snow below them. On the se corner of the peak is a n-s running cliff overlooking snow to the east. Considering the other places where ^{rosy} finches have been seen in the park, these locations look adequate, though snow margins are less common & cliffs aren't as high. No Rosy Finches were seen however. Rock Wrens were heard on the east & west faces & Mtn Bluebirds were seen on the west ridge of cliffs. (Farner saw Rosy Finches on Aug 25, 1948 on Mt. Scott).

June 29 Cloudcap, Crater Lake National Park, Oregon
Hiked from Rim Rd north cross country to road on Cloudcap ⁽⁸⁰⁷⁰⁾ & vicinity. Saw no birds & habitat seems inappropriate for Rosy Finches. Few snow-meadow borders, considerable timber, and a large west facing dry meadow with many flowers. No cliffs in view from the top, they do occur down-slope to the west. A Townsend Solitaire singing

Journal

R.E. Johnson
1967

June 29 Cloudcap, Crater Lake National Park, Oregon
From a Lodgepole Pine where I parked my car.

June 29 Llao Rock, Crater Lake National Park, Oregon

After dinner I drove to the north side of Llao Rock⁽⁸⁰⁴⁶⁾, which has a very gentle slope & walked up the snow. The top has a highly developed turf which extends in long fingers down the north slope. Only a handful of trees break the large open landscape. A Rosy Finch was heard at 8:00 PM & one collected at a snow margin in the shade at 8:30 PM. A Horned Lark sings overhead at 8:40 PM. Mosquitos are more numerous than most places I've collected, but this may be related to time of day or etc. (Farner cites 3 records for Rosy Finches for Llao Rock in July & Aug.). Turf is mostly Carex breweri Boott.

June 30 Wizzard Island, Crater Lake National Park, Oregon

Left headquarters at 7:45 AM & drove to Cleetwood Cove Boat Dock, then road Dr. ^{Donaldson} Danielson's (Oregon S.U.) Limnology Boat to the ~~island~~ island. There was a Garter snake next to the ^{island} boat dock. A Pewee sang from the trees along shore. I walked the trail to the top of the crater, around it, into it, & finally down the north slope where there is a large snow field. This snow field & the one inside the crater were watched for

Journal

R.E. Johnson
1967

June 30

Wizzard Island, Crater Lake National Park, Oregon (cont.)
 some time for rosy finches. (There is one record of rosy finches from the island). The lower portions of the island are wooded, whereas the upper part is more open (steep slopes & scattered trees). The island is phenologically far ahead of the mainland. Many flowers are blooming, which are still buried with snow on the mainland. Low manzanita bushes, penstemon, Dicentra and other plants are blooming in large numbers. White-bark Pine occurs around the rim of the crater. Mtn. Bluebirds & Golden Mantled Ground Squirrels are common (as are Mosquitos & Ants). Many Western Pasqueflowers blooming on the east slope of the upper cone. The large snowpatches have no adjacent meadows, but instead overlies barren cinders. ~~The island is zoned~~ The zonation of vegetation is the same as the mainland but more compressed (I think). White-bark Pine occurs at the top even though it is quite low. Mtn Hemlock & Shasta Fir occur below this & perhaps lodgepole pine. It may be that only the upper zones occur here & so no compression. The western portion of the island is a chaos of angular ^{rough} chunks of lava forming a very irregular land contour & no soil. Three clear pools occur in this area. Birds on the island include Robin, Red-shafted Flicker, Oregon Junco, Olive-sided Flycatcher, Wood

Journal

48

R.E. Johnson
1967

June 30

Wizard Island, Crater Lake National Park, Oregon (cont.)
Pewee, Cassin's Finch, ~~Red~~ Red-breast Nuthatches, &
Spotted Sandpipers. Shoreline is rocky and
has many insects (dead) floating in the water.

June 30

Llao Rock, Crater Lake National Park, Oregon

I was ferried to the base of the rock & I
climbed up to the base of the main vertical
cliffs. No Rosy Finches. Rock Wrens & Dasby
Flycatchers were common. The ~~the~~ rocks were
very hot to the touch. Its hard to believe
rosy Finches could occur here except in places
with afternoon shade.

June 30

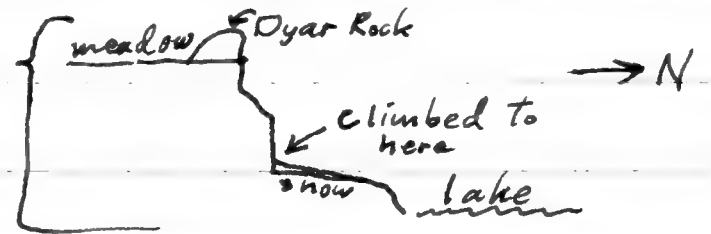
Garfield Peak, Dyar Rock, Crater Lake Nat. Park, Oregon

Hiked from the lodge after dinner & remained
until after sunset. Saw no Rosy Finches.
Rosy Finches have been scarce in the places I've
been the last 2 days, perhaps its not the
locations but the change in weather (hotter).
Mosquitos have increased with the heat. I'm
now rather bumpy! Four does & a fawn were
laying east of Dyar Rock on the meadow at 7:45 PM
& long shadows from Garfield Pk. had almost reached
the rock. At 9 PM a Fox crossed the meadows
heading east.

Journal

July 1 Garfield Pk & Dyar Rock, Crater Lake Nat. Park

Arrived at Garfield Pk at 7:30 AM. Clear, warm. Hiked to Applegate Pk. Spent one hour at Dyar Rock. Climbed down snow from rim west of Dyar Rock to base of second set of cliffs below Dyar Rock.



to get a better look at snow margins & snow fields in this area & to listen & watch the cliffs for Rosy Finches. Returned to Rim Village at 12 noon. Results: No Rosy Finches anywhere. Since this is where I had previously found the greatest concentrations of finches on June 25-28. Only one rosy finch has been seen since then (one on Hao Rock) & none at Dyar Rock on June 30 & July 1. The sudden disappearance correlates with a sudden change in ambient temps. and suggests that perhaps the finches leave areas of nesting (permanently?) if these areas become too hot, even after nesting has started (one ♀ collected had an egg nearly ready to lay). If they leave for cooler mtns, the closest possibility to the north is Mt. Thielsen (9182) ^{& Mt. Bailey (8363 ft)} 12 miles north of the north rim and to the south is Mt. McLoughlin (9495 ft.) 30 miles south. Union Pk (7698 ft.) within the park also looks possible (cliffs, snow, etc) but is rather low.

Journal

R. E. Johnson
1967

July 1

Garfield Pk + Dyar Rock, Crater Lake Nat. Park, Oregon

Evening Grosbeaks were seen near the top of Applegate Pk. A Red-shafted Flicker is nesting in a rotten snag in a hole 6-7 ft. up (east facing) beside the Garfield Pk Trail at 7500 ft. I heard Rock Wrens from the west talus slope of Garfield Pk for the 1st time today. Dick Brown says they occur there each year.

Drove to Diamond Lake (north of Crater Lake) after supper. Huge campgrounds jammed with people elbow to elbow. Can't see how anyone can enjoy that. Boats as thick as flies on the lake and mosquitos even thicker. Store + Service Station handy. Trail to Mt. Thielson (part of Pacific Crest Trail Summit) begins just east of Trailer park at se corner of lake.

July 2

Mt. Thielson, east boundary Douglas Co., Oregon

Clear, sunny, warm. Wind from sw. Low haze of pollen (probably from Lodgepole Pine) blowing over the valleys to west & also ^{light} green streaks of pollen in Diamond Lake. Hike up Mt. Thielson is up but easy & quick. A good trail leads through Lodgepole Pine until timber is open. Then trail splits from Pacific Crest Trail & is marked by yellow-orange paint all the way to the top of the Pk. Too many people on the trail. I left at 6:45 AM & I fellow was ahead of me. After a arrived on

Journal

R. E. Johnson
1967

July 2

Mt. Thielson, east boundary of Douglas Co., Oregon (cont.)
 top, one noisy party of 5 + another of 3 came up the trail. So what did I expect over July 4 weekend? Takes about 2 easy hrs. to summit.

One Rock Wren heard on the sw slope which the trail ascends. Rosy Finches heard several times & seen at least once on this slope, however they are probably ^{mainly} on the east, north & nw faces of the peak which are steeper & more snowy. Cliffs drop approx 2000 ft on the e. & n. sides. Cassin's Finches were seen twice on the cliffs at 8500 ft. Violet-green Swallows circled around the top of the peak (9182 ft.). A Raven was seen $\frac{1}{2}$ way down the e. face. Clarke Nutcrackers could be heard down the sw slope.

My route on the peak was as follows: up trail to top, down south ridge, to saddle with pk to south, diagonally across sw face (which trail ascends) to west ridge, up west ridge to top, down south ridge & then east down snow to bottom of east cirque, return up snow to ridge, down to trail & back to Diamond Lake. Total estimated climbing for day: over 7000 ft. Puff.

Rosy Finches were frequently heard chirping, yet they could not be located. It was finally decided to descend a steep snowbank for over 1000 ft into the east cirque where many of the finch sounds had come from. Here one ♂ was collected while singing from the top of

Journal

R.E. Johnson
1967

July 2

Mt. Thielsen, east boundary of Douglas Co., Oregon (cont.)
 a white-barked pine, one of a number fringing a cliff overlooking the floor of the cirque. Naturally the bird fell all the way to the bottom & lit in a stream. Only one other rosy finch was heard during the 2 hours I was in the cirque, but the cirque is so large I couldn't "hear into" all parts of it.

Just prior to returning down the trail to Diamond Lake, I attempted to locate a pair of finches I had heard earlier in the day. These were located on cliffs se of the trail after it turns straight up the mtn on loose rock. Unfortunately I did not have my notebook with me to record the details, but I apparently was dealing with a pair of birds, but they fooled me into watching the wrong suspected nest location for 2 hours. A bird did exit this spot (hole) at least once, but when I got higher (at 8:30 PM) I found that the hole extended through the cliff (2 openings) & there was no nest inside. While I was present in the area the male(?) sang a long series of chirps about every 15 min., usually from a rock prominence. Once a rosy finch was heard making an entirely new sound with the cadence of a white-tailed Ptarmigan. Drove back to Crater Lake for the night

July 3

~~Diamond~~ Crater Lake Nat. Park to Steens Mtns,
Harney Co., Oregon A day to clean up things, prepare my one Rosy Finch from Mt. Thielsen, & drive

Journal

R.E. Johnson
1967

July 3

Crater Lake Nat. Park to Steens Mtns, Harney Co., Oregon
to Steens Mtns. The latter proved to be a major chore. I left Park Headquarters at 1:30 PM & arrived at Fish Lake, Steens Mtns, at 11:30 PM.

(Time includes brief stops for gas & groceries).

Route followed: Paved - Crater Lake to Klamath Falls to Lakeview to Adel; then Dirt Rd from Adel to Plush to Hart Mtn Refuge Hdqts to French Glen to Fish Lake (approx. 92 miles on dirt).

There is a hotel, gas pump, & store at French Glen.

The road is very dusty & a 15-20 mile portion located between Hart Mtn & French Glen is so rough that one can only average 5 mph.

Most of the rest of the dirt road can be traveled at 40-50 mph (smooth, wide, ~~is~~ flat, & straight).

Fish Lake is an oasis on the ^{west} side of the Mtns. It has a pay campground (\$1 per night), spring, pit toilets, tables, & loads of fisherman with boats. A stream runs from the spring to the lake & another stream overflows the lower end. The lake is circled with aspen trees, otherwise the area is sagebrush.

Meadows around the spring are of sedge & false hellabore. A Robin's nest with 4 eggs was located over the door of one toilet. Oregon Juncos & W.C. Sparrows & Empidonax Flycatchers, could be heard singing.

The people running the campground indicated

Journal

R. E. Johnson
1967

July 3

Crater Lake Nat. Park, to Steens Mtns, Harney Co., Oregon
 that they reached the top of the range a day or two before on the Steens Mtn Loop Rd via Jeep. One snowbank must be detoured. They said the snow is a little later than usual. There are several banks of snow on the se shore of the lake also.

July 4

Fish Lake to summit Steens Mtns, Harney Co., Oregon
 Scattered clouds, sunny, hot. Drove on up dirt road toward top of range. Just above (100 yds) Fish Lake is Pate Lake (free camping but no facilities). Brewers Blackbirds & a Robin were sunning & preening on the west shore. A short distance further are two other lakes and many lush meadows & small streams. The entire west slope of the mtns are rounded and without trees except for a few patches of Aspen. Large snow patches cover approx. 20% of the upper west slope. Upper Blitzen Creek (River) has many large cliffs which may be adequate for rosy finches. The east face of the mtns however has huge bluffs with snow below, many very cirque-like. These look identical to those areas in most mtns where rosy finches are found. Mtn Bluebirds, Horned Larks, Violet-green Swallows, & Rock Wrens were seen along the top of the range. Horned Larks are most common on the grass west slopes, Rock Wrens

Journal

R.E. Johnson
1967

July 4

Fish Lake to Summit of Steens Mtns, Harney Co., Oregon (cont.)

on the rocky top of the ridges, & Violet-green Swallows over the snow of the east slope.

A ²/₃ grown Fox was scared out of a den in the rocks on top the main ridge. A yellow-bellied Marmot ran along a rocky ridge running east from the main N-S ridge. A Sparrow Hawk hovered over the west slope near the top of the ridge, facing west into the wind & looking down at the meadow 20-30 ft. below him. I continued south 2 peaks past Steens Mtn & descended 500 ft into the cirque between these latter 2 pks. This cirque is more shaded than most & moist, though it has less snow than most. Buttercups grew on the ledges (the 1st seen). A Sparrow Hawk sat on an outcrop 500 ft. below me & Violet-green Swallows dove about continually. A pair of Robins was seen below me. A Golden Eagle folded its wings & dove west over the 2nd pk. A number of sheep trails, one bedding place & some dung were found on the 2nd pk. I contoured this mtn to the east then onto the south. A lower mtn se of it also had a number of sheep trails & one Bighorn ram was seen feeding while working up the mtn. I ascended an overhang by leaping 6 or 7 ft upward!

There are no good maps of this area to my

Journal

R. E. Johnson
1967

July 4

Fish Lake to summit of Steens Mtns, Harney Co., Oregon (cont.)

knowledge. Most of the land belongs to BLM & is on their Oregon map with ~~with~~ little detail. The Steens are also on the USGS 1:250,000 scale topo map. This is the only topo map available. From the top of the pks so. of Steens Mtn one can see two roads from the east side that approach the ridge bordering Alvord Lake. One road goes up the south side of Little Alvord Creek & the other ascends the ridge between Pike & Indian Creeks. These 2 roads are not on either map. I next descended to the west in to the head of Wildhorse Creek to the upper of 2 beautiful lakes. ^{called Wildhorse} This lake still has ice on it along the west side where cliffs above shelter it from the afternoon sun. There are carpets of Buttercups and of Globe Flower that exceed in size & beauty those of the same species found in Glacier Nat. Park, Montana. Two 40 ft. waterfalls drop down the cliffs w. of the lake. The snow does have an abundant supply of insects. Snow margins are green, ~~lush~~ lush, & numerous. So far I have seen no rosy finches, but everything appears adequate: food, snow, cliffs. This canyon is south facing however & thus may get too warm. Lush meadows appearing nearly identical to those on Logan Pass in Glacier Park are often only a few feet from patches of sagebrush

Journal

R. E. Johnson
1967

July 4

Fish Lake to summit of Steens Mtns, Harney Co., Oregon (cont.)
and thistle (sunny, well drained slopes, so. facing)
This location is beautiful and its hard to see why
a rosy finch wouldn't be delighted. The streams
& waterfalls are so large that they drown out the
birds. It is possible that finches occur above
the Falls where there are extensive cliffs & snow &
that I would never hear them.

I continued up canyon on the west side
& up off the bottom a ways to improve my
chances of encountering finches. So far I've
heard 2 Rock Wrens, seen 1 Raven, & a number
of Violet-green Swallows. The upper end of
the canyon is a rounded basin of rock
slides covered with large snow patches &
fringed at the top with cliffs, especially on the
west side and the upper (no.) end. A Rosy Finch
was heard on the west wall 100 yds from the
head of the canyon at 5 PM. It had not returned
by 6 PM but a Mtn Bluebird nest was
located in a horizontal crack. I could not
see in to see the contents (crack was only $1\frac{1}{2}$ "
~~wide~~ high). A Golden Eagle circled overhead
while I was waiting. I next arched
over the ridge & hiked south above
Wildhorse Lake. Two Black Rosy Finches were
collected from the west side of the ridge.
The only previous record for these mtns is

Steens Mtns.

R.E. Johnson
1967



5 miles
— = main ridges

Journal

R. E. Johnson
1967

July 4

Fish Lake to summit of Steens Mtns, Harney Co., Oregon (cont)
for L. t. littoralis! Several others were seen but it was too late to collect them. This ridge & the next one west are loaded with snow & much more alpine than the higher main ridge to the east. They hardly show on existing maps. These 2 birds were collected at 8900 ft. at the headwaters of Indian Creek

July 5

summit Steens Mtns, Harney Co., Oregon
hazy clouds, cool until noon, wind from west. Returned to head of Indian Creek but did not find any Rosy Finches. Hiked back & forth over upper Indian Creek taking pictures of carpets of Buttercup & ^{Marsh Marigold - Calltha} ~~Globe flower (Trollius)~~ & small lakes. Then hiked out the ridge forming the south wall of Indian Creek, then backtracked & went south on the ridge forming the west ridge of the west fork of Wildhorse Creek. The north side of the former & east side of the latter have cliffs & snow, whereas the opposite sides are rounded & covered with low sagebrush. I saw no Rosy Finches. I circled back north, then east around the head of west fork of Wildhorse Creek (I had previously walked the ridge above, now I hiked on the slopes of the ridges toward the bottom). On the head of the canyon (so. facing) I heard a Rosy Finch chirp. Later (4:30 PM) I saw a Finch fly across canyon (W to E). No Rosy Finches were

R. E. Johnson
1967

Journal

60

July 5

summit, Steens Mtns, Harney Co., Oregon (cont.)
collected. A Rufous Hummingbird and a White-throated Swift were seen in the west fork of Wildhorse Creek Valley. Golden Eagles (pair) were seen often over the canyon.

On return to the car I noticed that cattle were grazing down the main fork of Wildhorse Creek. There are many signs of their presence in past years (dung, skeletons, campsites of herders, etc) in the upper end of Indian Creek & elsewhere.

A male Horned Lark was collected along the road west of East Rim View. It had been singing from the ground, mainly from small (3-4 inch) rock tops. Song was accompanied by ^{vibrating} partially outstretched wings. (7 PM)

July 6

summit, Steens Mtns, Harney Co., Oregon

cloudy before 9 AM, clear & sunny thereafter. Returned to head of Indian Creek under the assumption that if you've collected 2 males, you haven't collected them all. However none were seen there yesterday. Four had been seen on July 4.

While waiting I noticed that the cliffs used by the Violet-green Swallows are yellow and orange from lichen. There are also some white patches from Swallow feces. On ^{top of} some of the rock outcrops in the area are similar white deposits. This recalls the situation on Castle

Journal

R.E. Johnson
1967

July 6

summit Steens Mtns, Harney Co., Oregon (cont.)

Peak (May 29 notes) where orange lichen encircled the white deposits. Cliff Swallows occurred at that location. Perhaps the white is swallow feces + urine & it provides some needed item for lichen growth of certain species associations.

After approx. 2 hrs at the head of Indian Creek without any sign of rosy finches, I headed south along the ridge dividing the two forks of Wildhorse Creek and then descended the east side & returned north along the level of some high snowpatches, passing above both lakes & at a much higher level than on my previous trip (above the waterfalls dropping into Wildhorse Lake). Again no Rosy Finches located. Returned to car at 2 PM. Then drove north stopping here & there to look into the cirques on the east face. The most impressive cirque is the northmost of those on Big Alvord Creek (this and all others on this creek were listened into for 30 min or more each on July 4) which has the most snow & a half frozen lake at the bottom. North of this are a series of cirques ~~which~~ ~~which~~ which feed an unnamed creek.

East Rim View is located ~~at~~ ^{on} the ridge between this creek & the next one north (Mosquito Creek). The Mosquito Creek Cirque is quite impressive, with large cliffs (facing N, E, & S), snow, and a small lake. Violet-green Swallows seemed to be nesting on a NE facing cliff.

White-throated Swifts were seen overhead. Rock Wrens

Journal

R. E. Johnson
1967

July 6

summit Steens Mtns., Harney Co., Oregon (cont.)

called & Mtn. Bluebirds were seen on the cliffs. A pair of Horned Larks were collected from the adjacent dry grass meadows ~~that~~ that cover the flat top & west slope of the mtns. The nest had 4 young. Both adults feed the young, coming to the nest alternately and spaced at 15 min. intervals approx. Female has a brood patch. Both carried away fecal pellets from the nest in their bills. Young had well developed feather sheaths and were still downy. Inside of mouth is orange with several black markings (took photo).

The southern 2 cirques on Cottonwood creek are not very alpine, but the northern fork swings around so that the cirque wall is north facing; the wall is high & the cirque holds considerable snow. Kiger Creek runs N-S (eventually draining west) and has the largest U-shaped valley & cirque of all. Even though it is lower, it contains considerable snow. Two roads lead to it; One to Kiger Gorge View (on west rim) and one (unsigned) to the head of the gorge (there is a small lake on the lip of the gorge).

Next - drove to French Glen & stayed in the French Glen Hotel (manager Kenneth Pruitt). He called Malheur Wildlife Refuge for me to check on Rosy Finch records for the refuge & Steens Mtns. I talked to Mr. Scharff (refuge manager) & he said he had only seen them in winter & never in the Steens

Journal

R.E. Johnson
1967

July

Steens Mtns, Harney Co., Oregon

Flowering Plants of the "alpine" zone:

Blue Flax (Linum)Creeping Juniper (Juniperus communis)Bush Cinquefoil (Potentilla fruticosa)

Cinquefoil - at least 2 other species

Blue Bell (Mertensia sp.)Buttercup (Ranunculus sp.)Shootingstar (Dodecatheon sp.)Globeflower (Trollius laxus) → Marsh Marigold - CalthaFalse Hellebore (Veratrum viride)Phacelia (several species: white, purple)Penstemon ellipticusIndian Paint Brush (Castilleja sp.)

Lupine (2 species: tall, blue flower; short blue or white flower)

Sagebrush - (Artemisia tridentata)Willowweed - (Epilobium sp.)Yellow Violet (Viola sp.)Waterleaf (Hydrophyllum capitatum)Sky Pilot (Skunkweed, Climber's Weed) (Polemonium viscosum)Arens (Geum triflorum)Mtn. Sorrel - (Oxyria digyna)Mtn. Laurel (Kalmia polifolia)Green Gentian (Frasera speciosa)

Thistle

Stonecrop (Sedum sp.)Alum Root (Heuchera glabella)Yarrow (Achillea sp.)

Journal

R.E. Johnson
1967

Steens Mtns, Harney Co., Oregon (cont.)

Flowering Plants:

Sedge - sp.

Gooseberry (*Ribes* sp. — orange flower)

Eriogonum - 2 species — ① yellow flower (red buds)
② papery pink flower

Chickweed - (*Cerastium* sp.)

Valerian (Heliotrope) (*Valeriana sitchensis*)

Cruciferae - at least 3 species: white, yellow, ^{flowers} purple

Forget-me-not

Clover - pink, 3 leaved, minute

Journal

R E. Johnson
1967

July 6 summit Steens Mtns, Harney Co., Oregon (cont.)
though he knew the gray-crowned form has been reported from there. He was surprised at the Black Rosy Finch records I made. He suggested I stop at the refuge to talk to Mr. Willis Keasly (his assistant) who may have seen them in the Steens.

July 7 Frenchglen, Harney Co. to Indian Spring Camp, Grant Co., Oregon Malheur Nat. Forest

sunny, warm

Prepared the Horned Larks this morning while sitting in the new campground beside the Blitzen River east of Frenchglen on the Malheur Refuge. Birds everywhere.

Species seen:

Chat

Turkey Vulture - dozens ~~boasting~~ along river in trees

Cliff Swallow - nesting in cliffs over creek

Meadowlark (Western)

Common Nighthawk - booming at 9:15 AM!

Calif. Quail

Lazuli Bunting

Yellow-headed Blackbird

Snipe - winnowing

Robin

Rock Wren

Canyon Wren

Brewer Blackbird

Red-winged Blackbird

Journal

R.E. Johnson
1967

July 7 Frenchglen, Harney Co., to Indian Spring Camp, Malheur National Forest, Grant Co., Oregon (cont.)

Visited Malheur National Wildlife Refuge at 1 PM. Talked to Mr. Scharff and to the Biologist (Carroll Littlefield). They indicated that the Biologist assigned to the refuge last year had seen Black Rosy Finches from East Rim View. Very friendly people.

Drove on north to Burns, then to Seneca (via US 395) & turned east on a dirt road ^{USFS #162} leading past Parish Cabin Camp & eventually a fork, turning north to Indian Spring Camp (tall timber, good water, otherwise no facilities). Strawberry ^{Mtn.} ~~Peak~~ ^{Ft.} (9044) is only about 2 miles from the end of this road. ^{USFS Rd #1539}

July 8 Strawberry Mtn, Grant Co., Oregon

clear, sunny. Drove to end of road. Two hundred yards before rd's end is a "Wild Area View Point" where one can see the north face of many of the peaks to the east of Strawberry Mtn. These all have timber to the top & are lower, though they have rugged north faces (with timber growing out from the ledges, etc) & some snow. There is no doubt that Rosy Finches do not occur on them.

9:AM From the top of Strawberry Mtn one gets a more complete view of the north face of the mtns referred to above. In general they are rugged but not cliffs and all are below timberline. However ~~the~~ one area, the cliffs

Journal

R.E. Johnson
1967

July 8

Strawberry Mtn., Grant Co., Oregon (cont.)

above Little Strawberry Lake, is more rugged, has no timber on its slopes, and is not unlike some Rosy Finch habitats. It is lower than Strawberry Mtn and timber reaches the top from the south side.

Strawberry Mtn. ^(9044 ft.) is a large talus cone located north of the main E-W chain of mtns. Timber ^(White-bark Pine, Fir) extends up to 8500 ft. around it. Above this only low plants grow including a purple Phacelia, Alum Root, Sedum sp., Penstemon virens (?), Phlox (pink or white), ^{Cinquefoil} and Eriogonum sp (yellow).

There are no cliffs or cirques on the main pk. Below 8500 ft on the NW are a few low cliffs & a small snow pack ^{head of Overholt Creek.} These are less impressive than the area above Little Strawberry Lake.

The Foundation of an old lookout is located on top of the mtn. It is 2 miles from roads end to the top of the mtn. A Mtn Bluebird (or) was seen at timberline on the north side.

I dropped down the north side to the top of the lowest snow field (in the largest cirque) at 10 AM. A Pika was heard and several Chipmunks were seen. A Rock Wren sang from a talus slope & a Junco (appeared to be ^{Pink-sided} ~~Gray-backed~~) flew from near the snow. Rosy Finches were seen at the top of the snow area on a low (5 ft) cliff. They appear to have gray cheeks (littoralis). Collected one with a typical littoralis head pattern. A Mtn. Bluebird nest

Journal

R E. Johnson
1967

July 8

Strawberry Mtn, Grant Co., Oregon (cont.)

in a cliff 15 ft high with overhang above, was visited by both adults simultaneously. The male entered, ♀ waited outside & never entered. The ♂ carried out a white object (fecal sac) & both flew away together. A Swift (not White-throated) dove past the upper edge of the snow fields. (several return later - Vaux Swift). Rosy Finches were seen again 3 times (one on each occasion) & all were littoralis in head pattern. None could be collected. One sat on a 5 ft. pine & chirped, another fed on moist soil between the rock slides (Buttercups grew on ~~these~~ moist spots).

A Pink-sided Junco was collected from the top of the Mtn where it was feeding. It had a mouth full of insects, and a brood patch—therefore it probably had a nest nearby.

I walked back toward the car on the N-S ridge running south from Strawberry Mtn & ending east of the car at rd's end (the ridge turns east at this point, but I did not).

Halfway between Rd's end & the High Lake Rd Jct I stopped to pick up ~~some~~^{arrow} heads. There were many obsidian chips & I found 3 arrow heads in 20 min.

The High Lake road leads to a point of very easy access (less than a mile) to the ridge

Journal

R. E. Johnson
1967

July 8 Strawberry Mtn, Grant Co., Oregon (cont.)
behind Little Strawberry Lake (the location of
the other possible Rosy Finch cliffs).

July 9 Dixie Campground Grant Co., Oregon (on US Hw 26
8 mi NE of Prairie City, 5000 ft.)
Cool, cloudy.

Prepared skins of Rosy Finch & Oregon Junco collected
yesterday. Collected pair of Black-backed Three-toed
Woodpeckers in the campground nesting in an ^{Englemann} ~~Spruce~~
~~Spruce~~ tree, 8 inch dbh. Nest is north facing hole 7 ft
up in tree. Adults were feeding young by completely
entering hole head first & ^{also} exiting head first. Young
make a constant chatter. Forest is Englemann Spruce,
Douglas Fir, & White Pine. Collected three
Hammonds Flycatchers (?) in the campground. All
fed & perched under the canopy, usually no
higher than half way up the tree they were in.
Song consisted of the 1st note (1) only. Drove
to Baker, Oregon & camped at Marble Creek Picnic
area (camping not allowed, tables, water (creek), toilets). Tried
road to Goodrich Lake & it is closed (locked gate) to vehicles by
city of Baker (City Water Supply).

July 10 Elkhorn Mtns, Baker Co., Oregon

clear, sunny, warm. Drove up dirt road from picnic
area to Marble Pass (7350 ft.) in Wallowa-Whitman
National Forest. Hiked north along ridge through
open white-barked Pine and Fir (Abies) to Elkhorn Pk (8934 ft.)
and looked down upon Goodrich Lake. The cirque is
east facing & fairly sunny & dry. There is considerable

Journal

R.E. Johnson
1967July 10 Elkhorn Mtns., Baker Co., Oregon (cont.)

snow a short way above the lake (way below timberline) but little near the top. The east face is steep & rugged but not cliff-like. Timber grows to the top of the peak (except the last 5 ft) on all sides except the east.

The various cirques overlooking Pine Creek Reservoir are similar to Elkhorn east face except that they are north facing & have more timber. They have snow & diff at a low elevation.

Twin Lakes can be readily seen from Elkhorn pk & the ridge overlooking Pine Creek. The cliff above these lakes (east facing) look better for finches than those seen so far.

Rock Creek Butte (9105), the highest in the range, has a more barren look than the other peaks, suggesting it is nearing timberline. Trees do grow to the top however. Red Heather grows near the top on the south slope (the 1st seen in these mtns). The north face is beautiful rosy finch habitat even though there are scattered white-barked Pinetrees. Rock Creek Lake lies below & is 15% covered by ice. The cirque face is steep with many large cliffs & considerable snow at all levels. The rocks are cold to the touch! Flowers are different than those seen elsewhere & include Buttercups, Spotted Saxifrage, Mtn. Sorrell,

Journal

R.E. Johnson
1967

July 10

Elkhorn Mtns, Baker Co., Oregon (cont.)

Cinquefoil, Skunk Weed (Polemonium^{viscosum}), Alum Root, St. John's Wort (not in bloom yet), and Spring Beauty. Three Rosy Finches were collected at 2 PM & more were seen subsequently. ~~A~~ pair was taken (♂ littoralis & ♀ tephrocotis) & a single individual ♂ (apparent hybrid crown pattern). Clarke Nutcrackers are the most common birds, but Mtn Bluebirds & Rock Wrens were also seen. Mule Deer are very common on the ridges south of the peak & several bedding places were found. A Townsend Solitaire was seen singing from a tree top on the ridge. At 4 PM a ♂ Rosy Finch (♂ hybrid to littoralis backcross) was taken.

Flowers on the south slope of Rock Creek Butte include Phlox (white to very light pink), 2 species of Penstemon (virens & one similar to ellipticus ~~lyalli~~), and lupine and these & grass form a meadow.

Returned by way of Twin Lakes. Pika calls from a rock slide above upper twin. A W.C. Sparrow sang from low timber on the sunny side of the cirque (5 PM). There is still some ice on the upper lake. Meadows are lush & contain Buttercups & Globeflowers. Dry spots have Red Heather. A Grouse (Blue?) was flushed on the ridge above (no) the lakes. A Spotted Sandpiper was on the shore, at a side creek entrance ^{lower lake}. Lower wet meadows have shooting star & Sedge.

Journal

R.E. Johnson
1967July 10 Elkhorn Mtns, Baker Co, Oregon (cont.)

Trail goes down the east shore of the lake & outlet creek & in one mile joins the Elkhorn Crest Trail at a point where Tall timber appears. It is 3 miles back to Marble Creek Pass on this trail. Another trail continues down to Lake Creek Rd (1.4 miles) & Sumpter Highway (9 miles).

Methods of Reaching Rock Creek Butte:

1. From Marble Pass

a. ridge top (slow, considerable up & down)

b. trail to Twin Lakes (4 miles)

2. From Lake Creek Rd.

Trail to Twin Lakes (2.5 miles) - climbing all the way

3. Goodrich Lake Rd - Rd closed, must walk

4. Pine Creek Res. Rd } status uncertain

5. Rock Creek Rd }

Maps of area:

Baker District, Wallowa Whitman Nat. Forest 1966

Canyon City Topo Sheet 1:250,000

Drove to Anthony Lake Campground for the night. It is reached from Haines or North Powder via paved, then dirt rd. Large campground at foot of "Little Alps." Campground is 7100 ft, alps 8,300 - 8,400 ft. They are very rugged, timbered where there is soil, and have snow on the north slopes.

Journal

R.E. Johnson
1967July 11 Anthony Lake, Baker Co., Oregon

Up at 6 AM. Robin's nest ~~is~~ 10 ft up in 15 ft Englemann Spruce tree located 1 ft from lake shore & surrounded by ^{Globe Flower,} meadows. Meadows contain Shooting Stars, Glacier Lily, & Buttercups. Mtn. Chickadees, Oregon Junco, & Ruby-crowned Kinglets heard in the trees (Englemann Spruce, White Pine). Clarke Nutcrackers common. Spotted Sandpipers along lake shore. Drove around area briefly before leaving for Enterprise. There are many lakes (small) in the basin & several within easy hiking distance over various ridges. There is a small store, cafe, ranger station, 2 ski lifts, boats for rent, and many camp sites. Weekends are probably crowded with local people. Midweek (now) the campgrounds are nearly empty.

Drove to Enterprise to pick up mail, then back to Lostine & up the Lostine River. Several miles of road are under construction inside the forest boundaries & the detours are quite rough. Set up camp at Two Pan Campground at the south end of the road. No one else in camp. There are many other campgrounds further north along the road. This one has piped water, tables, toilets, etc. Skinned birds collected in Elkhorn Mtns.

July 12 Two Pan Camp to Elkhorn Peak, Wallowa Co., Oregon
(written several days later)

The Minam Lake (Lostine River) trail was followed ^{to} the Copper Creek trail. The 1st river crossing is outside the Eagle Cap Wilderness Boundary and has a large concrete

Journal

R.E. Johnson
1967

July 12

Two Pan to Elkhorn Peak, Wallawa Co., Oregon (cont.)
bridge. The second (at the Jct with the Copper Cr. Tr.) must be forded. The bottom is smooth, sandy, & easy to walk on, but the water is fairly fast and deep. On the way in the water was a foot lower than on the return trip at 5PM when the ~~the~~ water was waist deep. The trail was followed to another Ford on Copper Creek. At this point a cross country route northwest was chosen up Elkhorn Pk rather than making the Ford & using the trail to gain further altitude. The south side of Elkhorn Pk is openly timbered with White-bark Pine. The north side is steep with cliffs & the cirque is entirely snow filled. After spending an hour or more on top, I descended into the cirque and explored. Very little bare rock or ground was exposed anywhere within the cirque (snow covered as mentioned) and therefore no place for Rosy Finches to feed on meadows or snow margins. One Water Pipit was seen singing in flight & from rocks on a so. facing slope of the cirque. One Pika was heard. No Rosy Finches & no other species were noted. (Elkhorn Pk - 1200 ft)

Journal

R.E. Johnson
1967

July 13 Two Pan to Eagle Cap Pk, Wallowa & Union Cos, Oregon
Scattered clouds, warm.

Left camp at 7:15 AM & hiked up ~~up~~ canyon on East Lostine River Trail. The first ford is not as deep as the one crossed yesterday (today's only knee deep) but it ~~is~~ is rocky bottomed & very swift (not to mention the numbing cold) making it an interesting crossing. The trail climbs to about 7100 ft at Lost Lake (a flooded meadow) & then levels out and the valley broadens. The meadows covering the valley floor are still partially snow covered & are very lush & skishy, but flowers are coming out everywhere earth is exposed (buttercups, shooting star, red heather). I caught 2 six inch trout by hand in a small brook on the meadow & packed them in snow in a plastic bag - dinner! Yum yum. The creeks & flowers are so numerous that it's hard to keep my mind on Rosy Finches. At 10:30 AM I reached the jct. of trails to Wallowa Lake (east), Minam Lake (west), & Horton Pass (sw). Mileages from this jct. are as follows:

① East Lostine River Tr. (#1662) (to north)

Two Pan 6 mi

② Minam Lake Tr (#1661) (to west)

Minam Lake 3 mi.

③ Trail to east

Wallowa Lake 13 mi (Via # 1810, etc)

R. E. Johnson
1967

July 13

Two Pan to Eagle Cap Pk, Wallowa & Union Co's, Oregon (cont.)

Hurricane Creek Rd 12 mi (via #1807)

⑦ Eagle Cap Trail (#1805) (to SW)

Horton Pass 1 mi.

Eagle Cap 3 mi.

East Eagle Rd. 13 mi.

From this point (Jct) on the trail is completely snow covered & progress is easy, cross country, over snow, up. A Cassin's Finch was seen feeding on the snow surface, several Mtn Bluebirds were seen flying from one tree clump (stunted) to another, W.C. Sparrow can be heard in all directions. Several lakes are in view along the route. Upper Lake is still 100% frozen over, Mirror Lake is 75% ice covered. From higher up (above timberline) one can see Moccasin Lake (almost free of ice) & a higher unnamed lake above^(so.) Mirror Lake which is 90% frozen over. Water Pipits can be heard from all directions once above timberline & the place is certainly more "alive" than Elkhorn Pk was yesterday. By 2 PM I had sat below cliffs on the ~~the~~ west edge of the north face of Eagle Cap, had explore the western most areas of turf & rock slide & had ascended the nw edge of the peak (not following the trail on the west ridge, but actually ascending the N face), and had arrived on

R.E. Johnson
1967

July 13

Two Pan to Eagle Cap Pk., Wallawa & Union Cos., Oregon (cont.)
top of the peak. No rosy finches were encountered. One rosy finch voice was heard down the N. face at 2:40 PM. I then hiked down ~~the~~ the south slope, then east on snow & back around to a position on a brown dike, slightly below where I heard the finch, but still above the rock rubble & major part of the snow. Meanwhile heavy black clouds have been pouring in & a few drops have fallen. It has rained NE of here (toward Wallawa Lake). Clearly there are few Rosy Finches nesting on this mtn. The area is much larger than Elkhorn Pk so that I cannot be as certain (can't sample as thoroughly) regarding the numbers, but the breeding density must be low. Dr. Miller, Ward Russell & others collected here & on Elkhorn Pk & got 19 birds! Either things are different this year or I'm in the wrong place on the mtn by quite a bit.

The N side of Eagle Cap Pk is steep with broken cliffs & snow below ending in large moraine like boulder piles. Below these is more snow & islands of rock outcrop with turf, ^{occasional} trees (stunted), and pipits. Below this comes islands with trees, then more cliffs, then lakes (Mirror, Moccasins, etc) with ^{open} timber around them (at 7600 ft.). The west side has a gentle gravelly slope & ridge & small trees extend well up the

Journal

R. E. Johnson
1967

July 13 Two Pan to Eagle Cap Pk., Wallowa & Union Co's, Oregon (cont.)
pk. The south slope is gentle & low, ^{open} timbered. A SE ridge connects to pks to the S & E (south of Glacier Lake) (this is the ridge I descended). The E face is again steep, but not as abrupt as the N. It descends via several ^{series of} snow slopes terminated by boulder moraines to Glacier Lake. Therefore the N & E faces seem appropriate for Rosy Finches, the N being best.

The mtn is made of a granitic type rock with ^{dark} brown dykes plainly visible in the north face. The most common plant on the N Face is Skunk Plant (Climbers Weed - Polemonium viscosum) & on the west gravel slope Carpet Pink (Silene acaulis) & other cushion plants. Pikas occur in the rock moraines & on the broken north face. A pair of Mtn. Bluebirds were seen twice on the NE corner. A Rosy Finch chirped from below (E) ~~me~~ me, then flew over & turned south, landing on a rock outcrop surrounded by snow on the SE ridge. Shortly, 2 other birds appeared on the outcrop and one chased another north for 100 yds & both landed (the 3rd remained behind). The chase resumed when ~~the~~ the pursuer took off & flew again at the other bird. However this bird circled back & headed for the same outcrop (& ~~the~~ 3rd bird) & all 3 birds flew south, the chase continuing. I hiked over to the outcrop & shortly one bird flew silently

Journal

R.E. Johnson
1967

July 13 Two Pan ~~to~~ Eagle Cap Peak, Wallowa & Union Co's, Oregon (cont.)
to the snow below the outcrop & then gradually worked its way up the snow edge to the top of the ridge above. It apparently flew down again as I was climbing (no bird was above when I arrived at the top, but a bird appeared again at the bottom) and I collected it as it moved up. It is very dark (almost Black), a male, with an extended buccal pouch. This is the first bird I've seen with a pouch so expanded that it displaced the feathers under the chin and had a firm feeling to the touch. I returned down canyon to Two Pan, leaving Eagle Cap at 5:30 PM & arriving at camp at 8 PM. After dinner I drove to Enterprize to get a motel room, clean up, etc before buying supplies, picking^{up} mail, and getting a filling replaced in one tooth the next day.

July 14 Enterprize, Wallowa Co., Oregon

Spent the entire 8 to 5 day in town. Answered mail, bought groceries, did laundry, stuffed the one rosey Finch, and got my tooth filled at 3:15 PM by Doc Clark. Drove to Wallowa Lake to see what kind of camping facilities, etc were there. At the upper end of the lake there is a large State Park with picnic & camp-grounds and a large marina. Campgrounds are newly revamped & have free showers, hot & cold H₂O in the restrooms, paved roads, tables, electric stoves at many campsites, etc. Rather fancy, too

Journal

R. E. Johnson
1967July 14 Enterprise, Wallowa Co., Oregon

Fancy. Nearby is a lodge, store, rental cabins, pack station, roller rink, and go-cart concession. The area is pretty (forested with big timber) but cheaply commercialized. Too much coney island variety entertainment. The State Park has evening campfire talks 3 nights a week. I drove back to Two Pan arriving sometime after 10 pm.

July 15 Two Pan, Wallowa Co. to Eagle Cap Pk, Union Co., Oregon

Beautiful clear, warm day. I got a late start, getting up at 8 AM, then eating & packing & finally hitting the trail at 10:15 AM. There were a number of people on the trail before & probably after me. Along the lower mile of trail the following species were noted: Dipper, Winter Wren, Red-shafted Flicker, Varied Thrush, Hermit Thrush, Audubon Warblers, Townsend Warblers, Ruby-crowned Kinglet. Farther along (2.5 to 3 miles) at Lost Lake Spotted Sandpipers were common. Robins & R.-C. Kinglets were also seen. A short ways above the lake I again stopped & hand caught 2 Eastern Brook Trout (6 & 7 inches). Trout are everywhere. They dart out from ^{under} the banks of the river or small brooks with your every step.

Arrived in a small basin at 8500 ft. on the north side of Eagle Cap Pk at 3 PM after a most leisurely trip. Set up camp here with boulders on 3 sides of me & snow on the other (so). A good sized creek arrives from the snow. A small (4 x 20 ft.)

Journal

R.E. Johnson
1967

July 15 Two Pan to Eagle Cap, Wallowa & Union Cos, Oregon (cont.)
 patch of earth beside the stream serves as camp.
White-crowned Sparrows & Water Pipits could be heard below camp. I explored the ridge running NE from Eagle Cap Peak & observed many Water Pipits. At 6 PM 2 Rosy Finches flew up the ridge. One was black & the other brown in color. At 6:30 PM 2 flew down the ridge, one continuing far below me & then circling back, landings, chirping from a rock top, & finally dropping to the ground and feeding. I collected it (♂ - brown) & headed up-slope. At 7 PM I collected another rosy finch (perhaps the 2nd one seen shortly before) as it chirped from a rock top (also ♂ - brown ^{in color}). These 2 birds are clearly different than the one ~~seen~~ collected on July 13 & the one seen earlier today.

It was observed that the Water Pipits sing while flying up into the air as well as on the glide down. Two speeds of song occur during the flight. On the glide the wings are partially extended and the tail is up.

There are 3 species of heather on this NE ridge, both red & white Phyllodoce and white Cassiope.

A Rock Wren was singing from a boulder ~~margin~~ above camp when I returned at 9 PM.

July 16 Eagle Cap Pk, Wallowa & Union Cos, Oregon

I awoke to find black clouds pouring over Eagle Cap

Journal

R.E. Johnson
1967

July 16

Eagle Cap Pk, Wallowa & Union Cos, Oregon (cont.)

coming from the south. I promptly got up & packed things in such a way as to keep them dry, but my sleeping bag was already fairly wet before I got to it. Ate breakfast & then headed for Horton Pass to get a look in the direction of the storm (ie. should I hike out to Two Pan or not).

Rain was light & off ton and continued all day.

At 8:30 AM I saw one Roxy Finch east of Horton Pass & flying east low & dodging through tree tops & rock outcrops as if to keep out of the wind. This bird again appeared dark (black). At 9:30 AM

encountered 2 Chipping Sparrows near the pass. A flock of 15 Imma. Oregon Juncos fed on the ground & flew to the trees ~~at~~ the slightest disturbance. A Blue Grouse was flushed from a tree. A flock of 10-15 Red Crossbills flew over, circled and landed in tree tops.

A short while later they and the Imma. Juncos & several Pine Siskins were feeding along & bathing in a small brook of melt water only 20 feet below the snow bank of origin. One Pine siskin fed ~~at~~ standing on the tip of a Fir (Abies) branch and pecking between his feet. The crossbills were variable in color: some red, some orange to yellow, and some brown striped. At

10:20 AM a W.C. Sparrow sang from a White-bark pine top. An Audubon Warbler (♂) carried a green

caterpillar in its beak. A Hummingbird (probably a ♀ Rufous judging by size alone) seemed intrigued by my

Journal

R.E. Johnson
1967

July 16

Eagle Cap Peak, Wallowa & Union Co's, Oregon (cont.)

bright red raincoat and made several passes at it. By 11:30 AM I had traversed the ridge west of Horton Pass to point 8910 ft. and had gone south along the ridge to Frazier Pass $\frac{1}{2}$ mile and returned to 8910. Here I again encountered a Red Crossbill flock and collected one in orange plumage shades. I descended the north slope of the mtn & circled east above Upper Lake & back to camp at the foot of Eagle Cap Pk.

After a late lunch I traversed up the snow going east in front of (No. of) Eagle Cap & sat on top the highest boulder moraine watching for Rosy Finches. At 2:50 ~~PM~~ ^{AM} a Rosy Finch chirped from a high boulder on the NE running ridge of Eagle Cap & then disappeared to the south. I hiked up to that point & again waited. Mtn. Bluebirds were again seen in this area (see July 13) this time both ♀ & ♂ were carrying food.

At 3:40 PM a Rosy Finch flew over & chirped & continued south, landing on a rock outcrop $\frac{1}{4}$ mile south & on the so. ridge of Eagle Cap Pk. It then made slow circling glides ^{out} from the cliff & returning to a new perch. This was done about 10 times. I was too far away to tell what song may have accompanied these glides. Finally a second bird flew out from low on the cliff area (actually broken cliffs and boulders) and flew to the top of the cliff. The 1st bird then remained on the cliff ($\frac{1}{2}$ way up) &

Journal

R. E. Johnson
1967

July 16

Eagle Cap Peak, Wallowa & Union Cos, Oregon (cont.)
 sat. I hiked to the area but upon arrival found no birds. I waited about $\frac{1}{2}$ hour but since it was now clouded over, cold, windy, & me with ~~no~~^{no} coats except the red raincoat, I moved on to keep warm. The behavior had suggested a nest might be present where the 2nd bird had flown out. I traversed ^{on snow} on SE to a point below (No. of) Glacier Pk and then headed up it, ascending the west ridge just below the top & going east to the summit, then continuing east down the opposite ridge overlooking Prospect Lake. At a point directly above Little Glacier Lake I heard a Rosy Finch below on the No. facing cliffs. Shortly a finch flew from there to the east along the cliff to a more broken area with small firs growing on ledges. It moved from tree to tree continuing east. I rushed down the ridge to try to intercept it. I located one dark bird on the so. slope of the ridge but it flew over the ridge (No.). I went after it but found a browner individual feeding on the ground amid small (1-2 ft) firs. After considerable difficulty I finally collected this bird (now raining) from too close a range (now or never situation). It was a ♀ with brood patch. I descended to Glacier Lake & hiked west to the head of the cirque & No. along the base of Eagle Cap & down to camp. By this time

Journal

R.E. Johnson
1967

July 16

Eagle Cap Pk, Wallowa & Union Cos, Oregon (cont.)
rain had been falling constantly for 2 hrs. (2PM).
I packed up & moved down into timber at
the head of East Lostine River, only a few hundred
yards below Upper Lake. Here I set up my
plastic tube tent & fell asleep munching Cashews,
Carrots, an Apple, & a Hershey.

July 17

Eagle Cap & Glacier Pks, Wallowa & Union Cos, Oregon
Rain stopped at 7:30 AM. Spent the next 2 hrs
drying things out in the often-emerging sun
while bringing my Journal up to date and eating
breakfast. The "old" clouds seemed to disintegrate,
but by 9:AM new clouds were pouring in.
Around camp (fir trees & meadow) can be heard
Oregon Juncos, W.C. Sparrows, Ruby-crowned Kinglets,
and a Varied Thrush. Decided the weather was
no worse than yesterday so headed for Eagle Cap &
Glacier Pks at 10:15 AM. Located a Water Pipit nest
under an E-facing rock in a rock moraine below the
E. face of Eagle Cap. The bird flushed as I
stepped over the nest. The nest had no bottom
(bare earth) & only a grass outline indicating that
it must be under construction and that perhaps
the season is late. Only a few suitable islands
of ground have appeared this season. I assume
there are usually more such spots.

Hiked to base of cliffs (east of main summit of Glacier
Pk) where I had collected one ♀ Rosy Finch yesterday. At

Journal

86

R.E. Johnson
1967

July 17

Eagle Cap & Glacier Pks, Wallowa & Union Cos, Oregon (cont.)

1:40 PM I heard a Rosy Finch and at 1:50 PM one was seen toward the top of the cliffs. I circled c. around to the top of the cliffs, arriving at 2:10 PM. At 2:40 PM a Rosy Finch flew w. past the 2 dykes & landed. I shot it & it promptly fell and bounced 400 ft. & landed out of sight in a narrow (6 inch), but very deep bergschrund, where I could not retrieve it. Between 3 & 6 PM, seven additional Rosy Finches were seen. I shot at 5 of these and retrieved 3 by fancy engineering on the cliffs. One apparently fell into the bergschrund and another should have been in plain sight on a wide ledge, but wasn't. Thus 3 were collected, but many were seen; the most anywhere in the Wallowa Mtns. The cliffs here are extensive, the snow is the most extensive seen anywhere in these mtns, but perhaps most significant, there were numerous ledge covered with vegetation & moist ground & several nearby meadows, etc. Elkhorn Pk seemed to lack these feeding areas this year due to deep snow cover. Eagle Cap is basically rocky talus & moraine with little turf for feeding except the ne ridge where the bulk of the birds were seen.

It should be noted that both ♀ Rosy Finches had full buccal pouches suggesting that they were feeding young. Males appeared to have pouches (#178, 183 at least) but were empty except #176 which had a full pouch. This extends Miller's observations on the presence of pouches to male birds.

Journal

R. E. Johnson
1967


July 17 Eagle Cap & Glacier Pks, Wallowa & Union Cos, Oregon (cont.)

Rain began at 5:40 PM. Shortly I hot-footed it back to camp & then to Two Pan before rains began at the latter.

July 18 Two Pan, Wallowa Co., Oregon

A day in camp drying & cleaning equipment and preparing 7 birds collected on the previous 3 day pack trip.

July 19 Two Pan, Wallowa Co., Oregon to Seven Devils Campground, Idaho Co., Idaho.

 to Enterprize to pick up mail, etc, then north to Clarkston, Wash, and Lewiston, Idaho and then south again to Riggins, Idaho. Riggins is bigger than one might expect from the map, having a bank, P.O., several good stores, motels, gas stations, etc. Just south of Riggins, a dirt rd leads w. 18 miles to Seven Devils Campground. The rd passes through open grassy slopes in the warm canyon bottom & fir forests higher up. The campground is at the upper edge of the firs. The rd climbs 5800 ft in 18 miles. The campground has room for 6 or 7 parties & provides pit toilets, ~~and~~ fire places, & tables. Water must be obtained from a creek that runs E-W & is located south of the campground (the short trail to Seven Devils Lake crosses it. Seven Devils Lake is leaping with 10 inch Rainbow trout which are easily caught on worms (so the "liars" say). Less than a mile down the road from the campground is a road leading north 2 miles to

Journal

R.E. Johnson
1967

July 19

Two Pan, Wallawa Co., Oregon to Seven Devils Campground,
Idaho Co., Idaho (cont.) (8407 ft.)

Heavens Gate Vista Point, from which one can see 4 states & much topography as well as get a good view of the higher peaks of the Seven Devils Mtns. The Vista Pt. is a rocky pt. with an open White-bark Pine forest growing around it. Flowers include Yarrow, Cinquefoil, Hairbell, Alumroot, Phlox, Ertagonum, Sedum, Lousewort, Castilleja, Penstemon, Everlasting, Lupine, Jacobs Ladder, plus gooseberry, sedges & rushes. Glacier Lilies had mostly gone to seed. At 7:45 PM an Oregon Junco was singing. Chipping Sparrows & Mtn. Chickadees were also seen. Pocket Gopher working were common.

July 20 Seven Devils Campground, Idaho Co., Idaho

Clouds passing over in early morning (7-9 AM) and in afternoon (2 PM on). Left camp late (8:50 AM) & headed up the fisherman's trail from campsite 4 toward the spring. It leads to a cirque with snow in it, a temporary opening in the timber where Buttercups & Red Heather grow. A Pika was heard.

The trail goes to the right & mounts the top of the ridge which is covered with White-bark Pine. Chipping Sparrows & Mtn. Bluebirds feed on the ground under the trees and a Robin was heard. A Blue Grouse was seen also. From this vantage point Mirror Lake can be seen. The trail continues ^{west} along the ridge & is marked by

Journal

R.E. Johnson
1967July 20 Seven Devils Mtns, Idaho Co., Idaho (cont.)

Trail blaze marks on trees. When the ~~bridge~~ ridge turns south (actually e-w ridge joins N-S ridge) it is best to stay on the east side of the ridge as it passes above & south of Mirror Lake.

Here the ridge runs into a 9000+ ft. pkⁿ ^{Tower of Babel} & the ridge can easily be descended to Sheep Lake below (west).

Along the ridge Cassin's Finches & Oregon Juncos were seen, plus a Mule Deer in velvet. At 9:50 AM a Rosy Finch was heard somewhere on this peak but it could not be located. Shortly a ♂ Mtn Goat was seen above & W.C. Sparrows, Audubon's Warblers & Clark's Nutcrackers were heard. I

descended part way to Sheep Lake & so. into the first cirque & saw Townsend's Solitaires & Violet-green Swallows.

At 11:40 AM a Rosy Finch ^(ie. She Devil) was heard from below the 2nd 9000 ft. pkⁿ (west of the 1st but just east of He Devil Mtn.). At 12 noon 2 Rosy Finches were seen (one flying west, one flying east) on the northernmost part of He-Devil Mtn.

At 12:30 PM 2 Ewe & 2 kid Mtn. Goats were seen on a ledge on the NW face of He Devil. From 1:00 to 1:30 PM I ate lunch on top of He Devilⁿ ^(9393 ft.)

The view includes 18 lakes!, & The Wallower Mtn & upper slopes of the Snake River Gorge. The lakes include: Appendix, Rock Island, Gem, Shelf, Sheep, Hanson lakes, Echo, Quad, He Devil, Triangle, ~~and~~ Baldy, and Lily Pad.

At 3:55 PM young Rosy Finches were heard chirping

Journal

R.E. Johnson
1967

July 20

Seven Devils Mtns, Idaho Co., Idaho (cont.)

From the NE wall of He Devil. At 4:00 PM an adult chirped in series of 1, 2, or 3 chirps & flicked its tail with many of the chirps; all from a rock outcrop 100 yds away from me. Then it flew to a tree near to me and chirped briefly, then back near the original location, but this time perched in a snag. At 4:06 PM it flew to the nest & fed the screaming young. I then moved to where I could see this location better. At 4:40 PM both adults arrived near the nest. One (?) chirped a few times, then they both flew to the nest. The young chirped, then stopped. One (dark colored) bird flew in a glide from the nest. Shortly the other flew out and landed on a rock at which time it was aware of my presence. Perhaps it flew from the nest because of my presence. I collected it (♀ with brood patch and full buccal pouches). The full pouches suggests that it hadn't fed young yet & that I may have disturbed it. In the interval after this & prior to the next feeding (by the one remaining adult) the young became increasingly noisy. Their voices are less husky than those of adults but still quite well developed. At 5:43 PM the adult returned & quickly fed the now vigorously screaming young & left with a fecal sac. I was unable to collect

Journal

R.E. Johnson
1967

July 20

Seven Devils Mtns, Idaho Co., Idaho (cont.)

the bird from this location, so I moved again. Meanwhile both clouds & the mtn are in the way of the sun & I'm freezing. The wind isn't helping either. Clark's Nutcrackers have been noticed several times Feeding(?) amongst the rocks at the bottom of the cirque. Perhaps they catch the large black rock spiders?

A Townsend Solitaire fed below the Finch nest for 20 minutes. It flew from rock to rock on the talus slides & scree slopes picking up an insect here & flycatching an insect there. The other adult Rosy Finch returned at 6:39 PM. I collected it while it was feeding the young. (Male, fairly dark but not pure atrata) (buccal pouches full). The nest had 6 young of which 3 were collected, 2 fell out & down cracks and 1 crawled back out of reach on the nest ledge which extends into a crack more than arm's length deep. The nest was an old one of moss & dirt which had obviously been used before. It contained 5 fecal sacs. As usual, the nest was well protected from all sides & above. The nest was on a ledge of a side wall of a 4-5 ft wide crack in the cliff which has overhangs below preventing access ~~by~~ by mammals (and almost keeping me out — class 5+ climbing) & an overhang above. Completed rescue operation at 7:30 PM. On the return hike

Journal

R.E. Johnson
1967July 20 Seven Devils Mtns, Idaho Co., Idaho (cont.)

I observed considerable Rosy Finch activity in two locations: ① Just below (w) of the ridge & 1st 9000ft pk, ② on the nw corner of the pk between the 1st & 2nd 9000ft. pks. A Mtn Goat was seen on this latter pk.

July 21 Seven Devils Mtns, Idaho Co., Idaho

Clouds dark & pouring overhead at 6AM. Left camp at 6:30AM and arrived at the 1st of 2 points ~~pre~~ mentioned above at 7:25AM, hoping the Finches may still like this area. Clouds have largely cleared! The disgusting song of the American motor bike can be heard in the distance. Motor vehicles are permitted in the Seven Devils Mtns trails and I have noted a number of them. Grrr. White-crowned Sparrows & an occasional Clark's Nutcracker can be heard. By 8:10AM (45 min. wait) no Rosy Finches have been observed. They had been noticed near here both on the way in & out yesterday. It seems unlikely that there ~~could~~ be nest ^{young} with a at this site, left unattended by both parents for this long or longer. Then moved on ~~to~~ ^{toward} the second location. At 8:45AM a W.C. Sparrow approached the cliffs from a talus slope & moved up the cliffs nervously with food in its bill. There were bushes & small trees capping these cliffs. At 9:10AM I arrived above the 2nd location where finches were noted yesterday evening. A Sparrow Hawk flew by & landed in the sun on a snag. A Violet-green Swallow chirped constantly at it for some time thereafter. A Mtn. Goat walked a ledge I walked only minutes before

Journal

R.E. Johnson
1967July 20 Seven Devils Mtns, Idaho Co., Idaho (cont.)

(near "1st" location) & laid down in a bedding place I had walked through & noticed. This location is in the shade & it's cold. Crazy animal! One of yesterday's goats was still shedding, the others had completed the change apparently. No sign of Rosy Finch nesting activity by 10:05 AM. Two have been seen, none nearby, & both flying. Therefore I moved to a new location on the north face of this same pk but higher. At 10:20 PM a Rosy Finch flew by [&] toward the top of the 1st 9000 FT pk (easternmost) (Tower of Babel). After an hour I hiked on up the gap between the Tower of Babel and Baal Pk, then headed west to the top of Baal Pk (11:40) and She-Devil (12:40 PM). No Rosy Finches seen. Descended the south slope of She-Devil into a flat basin & then back up the other side to the top of Ogre (Mt. Apollyon) (1:40 PM). Saw a Blue Grouse down the north slope of Ogre at 1:20. Ogre overlooks Upper Cannon Lake.

Hiked down Ogre & then west & up (no.) between He Devil and She-Devil & down toward the nest that was located yesterday. A loud chirping was heard which turned out to be one of the remaining chicks (probably the one which had crawled into a crack; the other two which fell into cracks were apparently killed by the same shot which killed the male parent. How could this bird have lived 24 hrs without food &

Journal

R.E. Johnson
1967

July 20

Seven Devils Mtns, Idaho Co., Idaho (cont.)

while chirping so loudly & continuously? Shortly a Red-shafted Flicker flew over and landed high above. It called many times & the chick responded by chirping even louder. However I was very close to the chick — thus it was impossible to tell if the Flicker would have approached closer or not. I arrived near the finch chick at 3:10 PM. At 3:35 PM two Rosy Finches approached. They seemed to be chasing each other and once they left the area in chase only to return a bit later. The little bird flew toward them (can't maintain height) & rolled & tumbled. I shot one adult & immediately the other stopped in its tracks & looked at the dead bird, ignoring the chirping chick. I collected the second adult a minute later, still staring at the 1st. They turned out to be a male and a ♀ with brood patch. (I suspect the chick to be from the previous days nest because it is in the same location & is in identical plumage stage.)

On returning toward camp I passed high across the north slope of She-Devil and heard (4:45 PM) chirping of young Rosy Finches. There may have been chirping from 2 locations. At one of these a bird was observed entering & leaving with something in the beak although no chirping was heard on that occasion. Shortly after this a male appeared in the same area. A short while later the ♀ went to the nest (chirping) & the male was below me. I collected him. The ♀'s visit was short & she left with a fecal pellet. I moved to retrieve the male (in berry shrub) &

Journal

R.E. Johnson
1967

July 24

Seven Devils Mtns, Idaho Co., Idaho (cont.)

in hopes of getting a view of the actual nest location when the ♀ returns. Meanwhile there has been considerable activity elsewhere on the cliffs. A pair flew out from high above me after the sound of chirping had ceased in that area. Only 7-8 minutes later a single adult exited the same area after chirping was heard. On this occasion I was able to spot the general nest location fairly accurately. I may have to descend She-Devil from above to get near it.

Also a single male chirped loudly from two locations below me in the talus & then flew east around the north face of She-Devil out of sight.

Another pair flew west past me & went up (so.) the cirque between He Devil & She Devil.

It now appears that there are 3 & possibly 4 nests:

- ① High above the others as mentioned above.
- ② On Left hand side of huge snow finger extending up face of She Devil. This one is apparently east facing & beside a smaller snow finger extension of larger one. Male of this one shot (see above)
- ③ On the right (w.) side of the same huge snow finger as ②. Apparently also east facing but this nest borders the main finger. (male also collected)
- ④ Possibly nest on next big snow finger west of one mentioned in ② & ③.

Journal

R.E. Johnson
1967

July 21

Seven Devils Mtns, Idaho Co, Idaho (cont.)

The ♀ from nest 3 somehow manages to feed her young & leave without the young chirping. Both ♀'s come & go quietly & secretly, unlike the males who always chirp on coming & going. I took a spill on the snow & rocketed down the slope, spraining 2 fingers, cracking my shotgun stock, and otherwise shacking things up a bit. Decided it was time to put on crampons. Returned to camp just before dark to find the weekend invasion had begun. One portable generator going & a loud radio, all campsites full & more cars coming in.

July 22

Seven Devils Mtns, Idaho Co, Idaho

On the trail at 6:25 AM. Clear skies. Apparently quite cold last night, the snow is very hard, too hard to crunch with my climbing boots. Must use crampons to cross any snow slightly off level. One party of 3 men came in to Sheep Lake last night & another of 2 going to Mirror Lake this morning. After several stops I arrived at nest sites ② & ③ of yesterday. Along the way I saw one 4 point (one side) Mule Deer and 6 Blue Grouse (ridge above & no. of Mirror Lake).

Young in nest ② sound off at 8:30 AM. No adult seems perhaps it has found a new approach after yesterday?

One fledging young bird came bouncing & fluttering down

Journal

R.E. Johnson
1967July 22 Seven Devils Mtns, Idaho Co., Idaho (cont.)

The cliffs (quietly), apparently from nest ① one high above! I saw it fall 200 ft. at 8:43 AM. At 8:54 AM a Rosy Finch collected nest material nearly up to my feet, then flew around the cliff to the east. Another adult flew to where the young bird fell (out of sight to me) but no chirping was heard & no bird was seen leaving. Birds in nest ② chirped again at 9:02 AM, no adult seen. Pair appears, ♀ collecting nest material, uncertain about male. After several more visits from various finches all activity ceases. I climb cliff on left (east) of snow & collect a pair of finches (probably same pair as seen earlier building nest, since this was the only pair seen to come & go from this area). Hiked across face of She-Devil (going east) & collected a ♀ which had been chirping from a tree top. This is the first ♀ I've positively identified as chirping in this manner. Returned down to Sheep Lake level for lunch & found that approx 15 people were fishing, with morning catches from 0 to 8. Met Earl Hibbs (former owner of 2 ranches ne. of Seven Devils Mtns ^[see He Devil Topo for "Hibbs Cow Camp"] proper, early pioneer of the area, planted the 1st fish in some of the lakes; i.e. a real old timer of these parts — he caught the 8 fish! Now lives in Pullman, Washington) and asked him how the area got its name. He didn't know.

Climbed the Tower of Babel (9268) (the east-most 9000+ ft. peak) in the afternoon by the west ridge. Rosy Finches heard in a couloir in the east face — sounded like young

Journal

R.E. Johnson
1967

July

Seven Devils Mtns, Idaho Co., Idaho

Notes added later:

Mileage on the trail running south from the
campground area at Seven Devils (called Boise Trail):

Cannon Lakes 4 mi.

Hanson Cr. Lakes 7 mi.

Dog Lake 11

Horse Heaven Lakes 10

Horse Heaven 12

Met Dr. Roger Fendall of Agronomy Dept, Wash. St. U.
Pullman, Wash. with 2 others camped at Sheep Lake.
He will be moving to Oregon State U. this winter.

July 22

Seven Devils Mtns, Idaho Co., Idaho (cont.)

birds chirping. Also saw an adult Rosy Finch chasing a small falcon over the top of the peak. Violet-green Swallows were numerous on the north & east sides of the peak. Saw a 3 point Mule Deer on the ridge between Seven Devils Lake & Mirror Lake on the return trip. The first day I've been back to camp before dark & in time to skin.

July 23

Seven Devils Campground, Idaho Co., Idaho

[illegible]

July 24

Missoula, Missoula Co., Montana

Spent day at home at Mendocino with my friends (Irene Johnson, Alice Russell, Kate Loring, Mattell, Bob Nelson, Dr. Wright, Dr. Hoffman.

R. E. Hansen
1967

Journal

July 24 Chesley, Missoula Co., Montana. (cont.)

Dr. Thompson and I went to the...

July 25 Chesley, Missoula Co., Montana

Day spent making a survey of the Dr. Charles H. Hensel who has been working on the population of the... of the... at that station in the fall. Dr. Hensel... more... with me the... of the... in the... of Montana for... He has... some... to... and... some... to... have reported... The... in the... in the... of... which... to... for... Hensel... 1 & 2... from Dr. Hensel... to... local...

July 26 Chesley, Missoula Co., Montana to Hart's Pass Campground

Okanogan Co., Washington

From... in the... using... Interstate... then US 2 to Wilbur, then Wash 174 to Grand Coulee, then Wash 155 to Omak, then US 97 to Okanogan, then Wash 20 through Twisp & Mazama & finally dirt road to Hart's Pass. Camped in Hart's Pass Campground which has tables, pit toilets, stone fireplaces, and a spring downhill to the east of camp. Camp has space for approx. 6 parties.

Journal

R.E. Johnson
1967

July 26 Missoula, Missoula Co., Montana to Harts Pass, Okanogan Co., Washington (cont.).

A ranger station is across the road. The ranger mans Slate Peak Lookout part of each day.

July 27 Slate Peak, Whatcom and Okanogan Cos, Washington

Slate Peak is reached from Harts Pass by 3 miles of good dirt road leading north from the pass. There is a chain across the road 1350 ft. from the top, but visitors are welcome on foot. I parked at this point and hiked se along the ridge (away from the L.O.) overlooking the head of valley with considerable snow & meadows (middle fork of Pasayten River). The road lies just below on the south side of the ridge. Two Mule Deer does walked up the road oblivious of the snooper above them. A Hoary Marmot was seen along the ridge top and also a Cassin Finch. A dropped down to the meadows on the north ~~side~~ side of the ridge at a point about 1 mile se of the L.O. The following species were seen: Oregon Junco, Steller's Jay, Robin, Water Pipit, Chipping Sparrow, Pine Siskin, Cassin Finch, Mtn. Chickadee and Hermit Thrush. The Hermit Thrush was feeding several young birds hiding in a patch of Larch Trees. I collected 2 Mt. Chickadees from the Larch Trees. A Rosy Finch was heard chirping from the top of one of these trees at 11:06 AM. Later a pair of Water Pipits and ~~a pair~~ two adult and one young Horned Lark were collected on the meadows as I worked back to the west. The Horned Larks (all 3) are in molt and the

Journal

R.E. Johnson
1967

July 27

Slate Peak, Whatcom and Okanogan Cos, Washington. (cont.)

brood patch on one is beginning to be feathered (the other lacked the patch). The adults have small testes. the young bird already has an ossified skull and plainly visible ovary. It was begging & being fed by one of the adults. A Golden-crowned Sparrow was collected from the top of a small fir tree in a dense clump of same. A Rosy Finch was collected while feeding on the n. facing slope. Later an adult & one young were collected near a large snow patch on the ~~west~~ east slope below the L.C. A ♀ Rosy Finch was heard chirping again.

Flowers include: Globeflower, Spring Beauty, Paint Brush, Buttercups, Spotted Saxifrage, Fireweed, Skunkweed, Bush Cinquefoil, Western Pasqueflower, Carpet Pink, Dryas and Pentstemon virens & P. ellipticus.

Visited the lookout tower and met the L.C. (Jim Whipple) who is a geology major at Bellingham (Western Wash. State College). Also collected some gastropod & clam fossils from the road banks between the parking area & lookout. Jim says Ammonites have also been found.

July 28

Slate Peak, Whatcom and Okanogan Co., Washington

Returned to the same location again (The ~~head~~ ^{head} end of the middle fork of Pasayten River) which is open meadow with a few fir & patches of Larch trees. The meadow turns up slope & becomes dry sedge, ~~then~~ then rock slides before reaching the mtn. top. Large snow patches remain.

Most birds seem to have fledged young by now. This is true of Robins, Horned Larks, Rosy Finches, Hermit Thrushes,

Journal

R.E. Johnson
1967

July 28

Slate Peak, Whatcom & Okanogan Cos., Washington (cont.)

Water Pipits and White-tailed Ptarmigan. All were seen feeding young on the meadows. The Ptarmigan hen was seen with 6 chicks at the head of a snowbank. Soft clucks seemed to signal "freeze" to the young. Collected a Hermit Thrush. Mtn. Bluebirds & Clark's Nutcrackers were also seen. Hoary Marmots, Concys, Golden-mantled Ground Squirrels, and a small gray shrew^(in rock slides) are also present. Noted that Pipits & Thrushes moved rapidly over meadow feeding whereas Rosy Finches is more sluggish & remains in a more limited area.

Some young Rosy Finches already are chirping with the adult quality (ex. # 210) whereas others still have the chicks begging voice (ex. # 205). These juveniles can fly quite well (can fly uphill), can perch in trees, & do peck at objects frequently, but are still fed by the adults and they (Juv's) seem to spend most of their time sitting waiting (& chirping) for the adults feeding trips. The adult feeds the young & then leads them off (in flight) to a new location (one under a large rock) to wait its next return. It appears that at least 2 families were using the meadow just east of the lookout. Horned Larks & Water Pipits were also using this area to feed young. The area has considerable snow and more Buttercups than anywhere else in the vicinity.

Rosy Finch adults seem to prefer dry looking (bare earth, steep slope) areas to feed. Close inspection reveals these areas to be soggy wet instead.

Journal

R.E. Johnson
1967July 28 Slate Peak, Whatcom & Okanogan Cos, Washington (cont.)Rosy Finch ~~ex~~ Specimens:

#208 adult feeding young (buccal sacs full)

209 } adults in low (1-10 ft.) fir trees adjacent
211 } meadows & with a number of Imm. birds.July 29 Harts Pass Campground, Okanogan Co., Washington

Stuffed birds all day. Met Neal & Gwen Jacques who are camping here & are from the Puget Sound area (he an engineer with Boeing). Learned a ~~couple~~ new flowers: Alpine Veronica (4 petals, blue, 4 inches tall) - also seen in Seven Devils Mtns I believe.

Harts Pass Campground is located 19 miles west of Mazama and 10 miles from roads end (Chancellor). It is in the timber (fir). Flowering plants in camp include Arnica, Aster(?), Phlox, Everlasting, Juncus, Lupine, sandwort & Huckleberry. Elevation 6197 ft. (Elev. on Slate Pk.

7488 ft.)
July 30 Harts Pass Campground, Okanogan Co. to Trestle Creek, Bonner Co., Idaho
Drove down to Chancellor Campground (roads end 10 miles west & down canyon from Harts Pass) & to Barron. Both are former mining camps. The road above Barron to Windy Pass was closed off by a truck parked crossways on the rd, apparently to prevent looters from disturbing new mining developments going on above.

Drove down to Mazama & backup ⁽⁷⁷⁴⁰⁾ Early Winters Creek to a point just below Liberty Bell and Early Winters Spires (7807). The road is closed above this point but is nearly completed to Washington Pass (5250 ft).

Journal

R.E. Johnson
1967

July 30

Harts Pass Campground, Okanogan Co, Wash. to Trestle Cr., Bonner Co, Ida.

and work is underway between Washington Pass & Rainy Pass. When completed this route will be a paved all year cross mtn highway. Now it is dirt to rds end.

There is snow & ample cliffs around Liberty Bell, et.al. and there should be easy access to Rosy Finches.

Many rock hounds along the road near rds end looking for smoky quartz. I found a piece that would cut & facet beautifully and immediately became the envy of those present. Beginner's luck. I quit while ahead.

Drove to Winthrop & stopped at the District Ranger Station. They indicate that the Harts Pass Rd is due for rebuilding and that I may find it closed part of next summer — thus: write ahead to check on road building schedule. Several markets in Twisp and one open on Sunday (today). Ate a small cafe with a very cute little waitress, but I must rush on darn it! She was too young anyway (I have to tell myself something). Drove down river (Methow River) to US 97, then south to Chelan (Too commercialized — looks like Newport Beach) & Entiat & caught the Entiat Ferry across the Columbia River. Took US 2 east to Spokane, stopping at Sun Lakes State Park (Dry Falls of the Columbia River — active during Glacial Periods) and found another cute girl as Information Clerk (& life guard on other days) from WSU, Pullman. This time I talked a bit longer, but then up & left. One of these days I'm going to adjourn Rosy Finching long enough for a date.

Journal

R. E. Johnson
1967July 30 Harts Pass, Okanogan Co., Wash. to Trestle Creek, Bonner Co., Idaho.

Drove north out of Spokane via US 2 & 195 through Newport, Priest River, and Sandpoint to a BLM picnic area w. of Hope^{on US 10A}, where I found tables & water & camped.

July 31 Cabinet Mtns, Bonner Co., Idaho

Clouds developing to the east mainly. Warm.

Drove up Trestle Creek Road from US 10A. Most of the country is heavily timbered, however the ridge tops are somewhat open or sparsely timbered. For example the ridge between Trestle Creek & Lightning Creek (The Bee Top - Round Top Ridge) has north facing steep cirques with occasional tiny (5-10 ft.) snow patches. Thin timber does extend to the top of most of the pks. Many points are over 6000 ft. and the highest is apparently Trestle Pk (6320 ft) and the pk just north of it (6360+ ft.). A road (not on my maps) goes up the west slopes of this ridge from Trestle Creek Rd at a point a mile \pm below the switchback on above road. Trails lead off Trestle Creek Rd to various pks & ridges: ① Trout Pk (5226 ft.) is 2 miles by Trail 123.

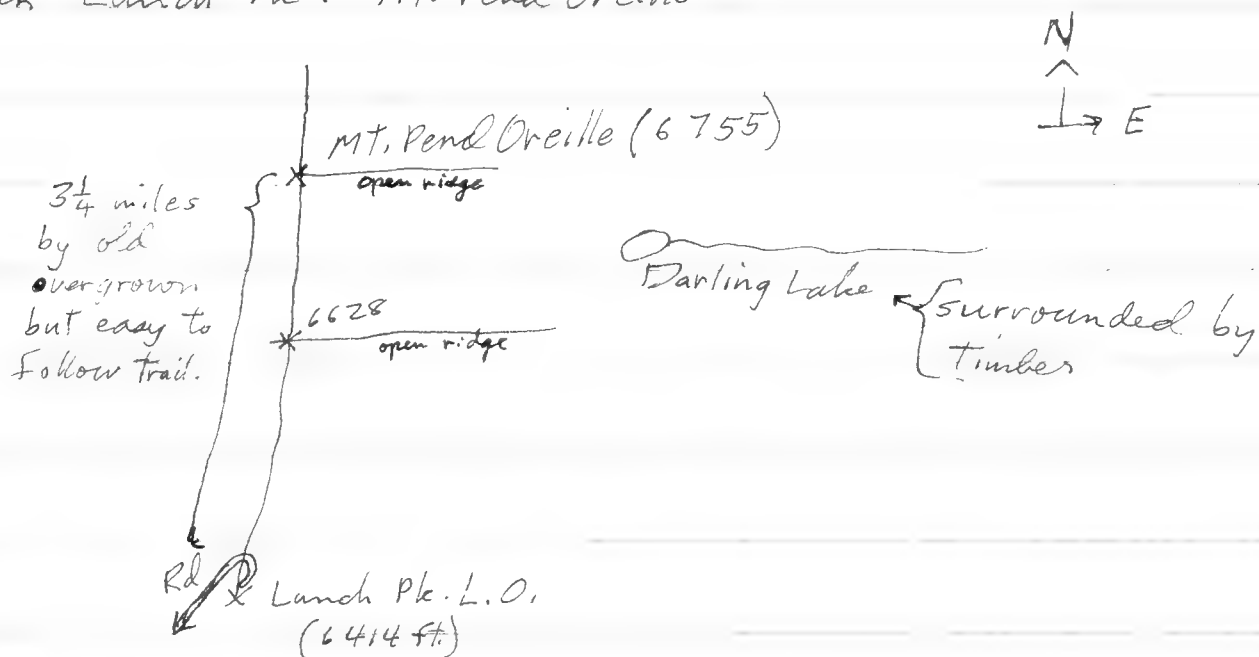
② Trestle Pk is 3 miles on trail 120 from the saddle between Trestle & Lightning Creeks.

(4 miles)
A road^(4 miles) leads to the top of Lunch Peak (6414 ft.) which has a lookout on it. The road leads from the above named saddle and is not on the maps. Lightning Creek is 3 miles via road from this saddle (& Hwy 10A is 9 miles back down Trestle Creek). The Lunch Pk L.O. stands on a rocky barren summit only a few feet above timber (firs).

Journal

R. E. Johnson
1967July 31 Cabinet Mtns, Bonner Co., Idaho (cont.)

Definitely no Rosy Finches on Lunch Pk. Can't quite see Mt Pend Oreille (6755 ft.) to the north. The map indicates it as having a larger barren area on top but all on the south slopes. The same is true of a ridge running e-w between Lunch Pk & Mt. Pend Oreille



The fire weather forecast indicates possible lightning storms.

Other points of interest: Scotchman Pks #1 (7009 ft.) and #2 (6989 ft.) and Savage Mtn (6906 ft.), se of Lunch Pk, seem to be steep, with cliffs & snow, etc. & look very possible for Rosy Finches.

NW of the lookout is a row of peaks (west of Bonners Ferry) which also look good for finches. Many of the peaks are over 7000 ft & are barren on top with visible snow even at this distance.

I walked the ridge north to Mt. Pend Oreille at midday (10-1 PM). Most of the ridge is timbered with low (max 40 ft.) fir (Abies) trees with an undergrowth of beargrass and huckleberry. The ridges east from Mt. Pend Oreille & the pk. south

Journal

R.E. Johnson
1967

July 31

Cabinet Mtns. Bonner Co., Idaho (cont.)

are rocky, have old snags, and are open grassy with ^(Aster, Castilleja, Lousewort, + Lupine) Eriogonum, Yarrow, Alum Root, Pentstemon elipticus, being the principle ground cover. The north slopes of these ridges have scrubby low Fir (1-3 ft) + numerous low herbs. These slopes taper off ^{below} as talus slopes. There are small snow patches (largest 20 x 80 ft.). This habitat isn't much different than Strawberry Mtn, Grant Co., Oregon would be at this date. Strawberry is higher, but farther south, had more snow, but I saw it earlier, and ^{above timberline} had a more distinct timberline (top 500 ft of mtn). Here timber has stood on top in the past and still closely approaches the top. The talus and snow are 600 ft or more below the summit making them considerably below general timberline (elevation uncertain however). There probably is more snow left at Strawberry Mtn than this. It seems very doubtful ^{that} ~~on~~ Rosy Finches would occur here on Mt. Pend Oreille. Walking the ridge I encountered a family of Spruce Grouse, Oregon Junco, Pine Siskins, and Cassin's Finches.

According to the topo map (Mt. Pend Oreille Quad, 15 min. series, 1951, with green overprint) Smith Mtn (8510) has a north facing cirque with a lake (Smith Lake, 5700 ft.) in it & it is untimbered. Perhaps this cirque would have better habitat for Rosy Finches. From here (due east of Mt. Pend Oreille) a small snow patch on the nw ridge can be seen but not the N. Face. There is a L.O. on top.

Journal

R.E. Johnson
1967

July 31

Cabinet Mtns, Bonner Co., Idaho (cont.)

I walked down the north ridge from Mt. Pend Oreille and it does have a more arctic look than the rest of the mtn. Sedges, Rushes, White Heather, & a few Glacier Lilies are added to the flora already listed for the top of the mtn. None-the-less the habitat lacks the arctic look. There are no cliffs. Even so I heard (12:30 PM) one "oink" note that sounded exactly like a Rosy Finch. A family of Robins & a single Townsend Solitaire were seen.

Returning along the ridge large mixed groups of young and adult Juncos & Chipping Sparrows were seen feeding on the ground beneath the fir trees. Several Townsend Warblers were seen with these birds. One bird of each of the following species were also seen: Clark's Nutcracker, Steller's Jay, Red-shafted Flicker.

White-bark Pine was not seen on Mt. Pend Oreille, but curiously a few trees of this species do grow on top of Lunch Pk. Glacier Lilies also occur there.

I next drove down Lightning Creek to Clark Fork District Ranger Station and then back up creek to East Fork Rd & up it, taking a right turn on Savage Creek Rd. I parked and hiked up a logging road & then trail 61. I continued up above trail end to a point west of Scotchman #2 at an elevation of 5988 ft. ~~at~~ From this location Scotchman #2 appears to have the better Rosy Finch habitat. I returned to the car in one hour in 15 min. Most of the trail was through tall timber (Red Cedar, etc).

Journal

R.E. Johnson
1967

July 31

Cabinet Mtns, Bonner Co., Idaho. (cont.)

with huckleberry & Fool's huckleberry growing beneath. Bear droppings were numerous & berry filled. Other plants included Twin Flower, Foam Flower, Pipsissiwa, Pine Drops.

I drove up Porcupine Lake Rd at dusk & camped by a small creek $\frac{1}{2}$ mile below the lake. The lake is in a north facing cirque & I had thought it might contain cliffs, snow, & rosy finches but on inspection I found almost no snow and the cliffs are similar to those on the north side of MT. Pend Oreille (ie. covered with low trees, not big bluffs, etc.)

Mileages on Lightning Creek from Clark Fork:

East Fork Rd - 7 miles

Porcupine Cr. Rd. 9

Auxor Rd. 13

Rattle Cr. Rd 15

Maps covering the area:

Clark Fork Quad	15 min	1951	} topog
MT. Pend Oreille Quad	15 min.	1951	
Sand Point -	1:250,000	1958	

• Noxon Ranger District, Kamiksuk Nat. Forest 1966

Aug. 1

Cabinet Mtns, Bonner Co., Idaho

Drove From Porcupine Creek back to East Fork Cr. Road & Savage Cr. Rd & hiked trail 61, then up the ridge, past the heliport to the open ridge top at 5988 ft. The hike took $1\frac{1}{2}$ hours (7 to 8:30 AM). Collected

Journal

R. E. Johnson
1967

August 1

Cabinet Mtns, Bonner Co., Idaho (cont.)

huckleberries as I more leisurely ascended the ridge heading east toward Scotchman #2. Between point 6536 ft. & Scotchman #2 is a sizeable cirque ^{(with shallow (25 ft.) lake.)} with a large nw facing wall (a few trees grow from it) & a large snow patch below (300 x 50 ft.), but very little meadow or ~~herby~~ herby slopes for feeding. From here on up the ridge small cirques with snow in them are found on the no. side of the ridge. An Empidonax flycatcher ^{(has noticeable yellow on sides) (at 9:40 AM)} was collected ^{silently} from the ridgetop at 6500 ft. The bird had moved back & forth from tree to tree (max. tree ht is 20 ft, most trees 5-10 ft.), never on sunny perches or on top. Trees are Fir (Abies) & White bark pine. A few trees of both species reach the top (not on summit rocks) of Scotchman #2. The cirque below (no. of) the top has snow and several small meadows with ponds in them. There are scattered groups of trees but the cirque is mostly open boulder slides & stair-stepping ledges. Clark's Nutcracker is commonly heard from the cirque. Perhaps the fact that rosy finches are usually nesting above timberline is related to the presence of the Nutcracker at lower elevations which is a major nest predator on finches. A group of 6 Swifts (Black or Vaux's) flew west over the pk at 11:10 AM.

At 11:30 AM a Rosy Finch was heard on the se slope. I pursued the sounds and noted several young birds in tree tops and several adults (at least 3). I collected a

Journal

R.E. Johnson
1967

August 1

Cabinet Mtns., Bonner Co., Idaho (cont.)

male and a female Tephrocotis. Littoralis was the race reported here (sight observations in the Murrelet) and this had appeared to me unlikely and this suspicion is now confirmed. A fisherman had contoured from some lake on Lightning Creek and located a nest and birds he had called Littoralis. I have been unable to find a lake on that drainage where this could be true. Porcupine Lake may conceivably have Rosy Finches above it but certainly none anywhere near on level with it.

Perhaps the most likely possibility is an unnamed lake east of Skotchman #2 which must drain into the East Fork of East Fork Creek. This lake is located in Montana north of point 6416 on the E-W ridge that separates Lincoln & Sanders Cos. It is not on the topo maps, but is on the shelf shown in green on the maps (meadow not forest) as located above & west of Little Spar Lake. It is of good size & may have fish in it. The cliffs of the ridge south of it are verticle & have snow below them & the whole area has a Rosy Finch look, more so than does Skotchman #2. Also the head of Spar Creek (above Little Spar Lake) and around Sawtooth Mtn & Middle Mtn (so. of Little Spar Lake several miles) have a very alpine look with cliffs & snow on the north faces. The ridge south toward Skotchman #1 is also quite alpine & may serve as feeding area for finches.

Two young Rosy Finches were collected in a large (2ft dbh, 20ft ~~high~~ high) White-bark Pine where they were

Journal

R.E. Johnson
1967

August 1

Cabinet Mtns, Bonner Co., Idaho (cont.)
 (pecking at branches, etc). Adults periodically flew to them, ^{couldn't tell if they fed them.}
 feeding. Other birds seen near the mtn. top: Chipping
Sparrow, Oregon Junco, ^{Pine Siskins}, Clark's Nutcracker & Cassin's Finch.
 Mammals: Chipmunk, Golden-mantled Ground Squirrel,
 Coy, Mtn Goat hair.

The rock is similar to that in Glacier Park, Montana (ie. sedimentary & argillite-like) ~~and~~ and occurs in 2 colors: light green & light purple — these weathering to greens & oranges. Ripple marks are common and small clam fossils (?) occur in some places & look very similar to the Cretaceous Shales of Glacier Park. Considerable banding occurs in some purple rocks.

The south slope where the Finches Fed is 50% cliffs & other rock & 50% trees (Fir & W.B. Pine) ~~and~~, shrubs (huckleberry, bear grass, creeping juniper), and herbs (Pentstemon ellipticus). Heather (Cassiope & the white Phyllodoce occur near the top (Cassiope ^{flowers} are mostly dried up already). St. John's Wort occurs near the top of the s. slope.

Snow Peak can be clearly seen to the east & a lookout bldg can be seen on top of Skotchman #1. The latter may be reached by a trail (6 mi.) from the south or by traversing the ridge south from Skotchman #2. The Montana - Idaho boundary marker is located several 'bumps' down the east ridge (just prior to the split in the ridge — one headed north as rugged lower peaks & one headed se above the unnamed lake.

Journal

R.E. Johnson
1967

August 1

Cabinet Mtns, Bonner Co., Idaho (cont.)

The cirque directly under the top of Skotchman #2 can be easily reached via class 2 route by descending a ~~wide~~ broad sloping bench of rock, dirt, & sparse low vegetation (which terminates at the ^{w.} snow edge below) which ~~is~~ starts at the ridgetop just a short ways west of the last large black cliffs to be surmounted in ascending the peak from the west. One can see the full length of the bench from ^{ridge} top to snowy cirque.

Returning west along the ridge toward the upper terminus of trail 61 a Sharp-shinned Hawk was seen perched in trees on the ridge top, a pair of Mtn Bluebirds perched on a snag overlooking open ridgetops of huckleberries.

Drove down to US10A and then NW toward East Hope to a dirt road turning left (2 mi) to Samowen Campground (USFS) for the night.

August 2

Selkirk Mtns, Boundary Co., Idaho

Skinned birds in Samowen Campground until midday & then drove to Sandpoint, then north on US 2 & 95 to the Pack River & up it 21 miles to the end of the dirt road which is 2 miles below Harrison Lake. Roads ^{& trails} branch off the Pack River road in various directions. Most important of these for reaching the high country of the Selkirk Mtns are the following:

Journal

R.E. Johnson
1967

August 2

Selkirk Mtns, Boundary Co., Idaho (cont.)

Zuni Creek Rd

to Roman Nose Lookout 6 mi.

to Rds End 2 mi

Priest Lake Divide Tr. # 217 (From roads end)

to Harrison Lake 2 mi.

Priest Lake Divide Tr. # 217 (From point 19 mi. up rd)

to Beehive Lake 4 mi
(can drive 1st mile)

West Branch Road (From 16.5 mi. up rd)

to Roads end 2.5 mi. according to sign
(actually 1.5 mi.)

to Chimney Rock 5 mi.

The Selkirk have a number of peaks above 7000 ft. Most of these are west of the Pack River but Roman Nose (7264 ft) is on the east side. It has several lakes located on its ne side & apparently steep cliffs above them suggesting Rosy Finch habitat, however the peak itself has sparse timber to the top on the south ~~and~~ & west slopes. It is probably most easily reached by road from the east side.

On the west side of Pack River the high points (from south to north) include Gunsight Pk (7200 ft), Mt. Roothann (7200 ft), ~~Chimney Rock~~ Chimney Rock, Twin Peaks (7200 ft). Several other pks occur at the head of the canyon including Harrison Pk (7000 ft). Twin Peaks look particularly alpine in character.

Drove back to Sawtooth Campground that evening.

Journal

R.E. Johnson
1967

August 3

Samowen Campground, Bonner Co., Idaho to Missoula,
Missoula Co., Montana

Drove to Missoula to get mail, pick up a wedding gift for Monty Parratt (& Laurel) to take to West Glacier, cash a check, replace an ax handle, do laundry, & look over specimens of rosy finch in the U. of Montana collection. Particularly noted the several "Taborized" specimens ^{ie. (mutilated)} collected by Dr. Tabor in the Flint Creek Mtns. Specimens of both atrata & tephrocotis & no intermediates.

August 4

Missoula, Missoula Co., Montana to Aralanche Campground, Glacier
National Park, Montana

Finished up work in Missoula & drove to Bigfork (where I visited Dr. Wm. Rowan, who has quit parasitology to run a book & art supply store "The River House") & then Glacier Park to deliver the wedding gift and locate the Sharpes (they were camped in Aralanche Campground).

August 5

Aralanche Campground, Glacier Nat. Park to Leigh Creek,
Lincoln Co., Montana

Left Glacier Park at approx. 5 PM with Gloria & Ruth Sharpe. Made several stops in Kalispell and then on to Libby. Returned east again to Bear Creek Rd & turned south on it as it parallels the east side of the Cabinet Mtns. Followed signs toward Leigh Lake (many rds unsigned however) & set up camp a mile below roads end on a flat spot with creek nearby.

August 6

Leigh Lake & vicinity, Lincoln Co., Montana

Rained off & on all day. Some thunder. Hiked up canyon to Leigh Lake & around the south side & up the south side. Followed

Journal

R.E. Johnson
1967

August 6

Leigh Lake & vicinity, Lincoln Co., Montana (cont.)

the ridge west to the main N-S ridge & then followed this latter ridge north toward Snowshoe Pk to approx 7900ft where cliffs impede progress. Walked down a sloping broad ledge on the east face (ends in a large snow patch beneath a cliff) and heard rosy finches. There were several Families (4+) using the same general area. Young & parents would fly back & forth over the cliff face intermixing somewhat with other groups. The cliffs are nearly vertical but have many places where they may be ascended easily (class 3-4). Many trees grow from the cliffs & the finches often sit in these, especially young begging & adults observing me. I killed 6 but only retrieved 4 because of impending ~~darkness~~ + a new onslaught of rain & hail. The other 2 birds were plainly visible but difficult to reach, especially on wet rock. All birds appeared to be Tephrocotis.

Returned down the mtn. by a somewhat different route. First south down the N-S ridge (as before), then ^{& smooth rock slab} down a talus slope beside snow to meadows & snow below, then se along the lower border of snow almost to the low pass on the south ridge, then north down a small creek to near lake level, then around the south shore. This route is easier & faster than the route following the ridgetops which requires excess up & down cliffs & a few extra cliffs.

There are many goat trails & bedding places, &

Journal

R.E. Johnson
1967

August 6

Leigh Lake & vicinity, Lincoln Co., Montana (cont.)

considerable goat hair on trees along the N.S. ridge.

The ridge & pks are timbered (very open stands) with alpine fir (Abies lasiocarpa) & White-bark Pine. Below

the east face on the meadows are many larch trees.

Vegetation^(herbs, etc) on the peak itself includes: Huckleberry (dwarf),Creeping Juniper, Red & White Fleathers (~~Phyllodoce~~), Parthenonellipticus, Alum root, Yarrow, spotted Saxifrage, Mtn.

Hairbell. The top of the peak was not reached.

August 7

Leigh Lake & vicinity, Lincoln Co., Montana

Clouds pouring in overhead at 7AM. Rain by 8AM. Cloudy (low - never could see top of Snowshoe Pk) all day with high winds from west.

Returned via 2nd route to Snowshoe Pk to get 2 remaining rosy finches. Found one (Juv.) but the other^(adult) was gone (ledge empty). It had been very securely lodged, suggesting an aerial predator may have found it (can't be reached by mammals). Once a couple Rosy Finch voices were heard nearby, but the bulk of the birds are absent today. Other birds: Clark Nutcracker, Pine Siskin, Oregon Junco.

Searched below the cliffs and found one dead Juv. Rosy Finch at approx. the location where the missing adult would have fallen. Perhaps I was wrong about the age of the missing bird or perhaps this is another bird that I shot yesterday & didn't locate.

Hiked down via same route as I had come up. Explored

Journal

R.E. Johnson
1967

August 7

Leigh Lake & vicinity, Lincoln Co. Montana (cont.)

snow margins, rock slides, & meadows along the way. No Ptarmigan, Water Pipits or Marmots were seen. Since the day was 100% overcast & rainy Marmots, if present, were not likely out anyway. A number of seemingly favorable locations (large boulders covering a large area & extending to lush green vegetation) for Hoary Marmots were noted south of the head of Leigh Lake. These also appeared to be favorable Ptarmigan habitat (large snow banks, ^{wet} rocky ledges, lush streamside meadows) but no birds or scat were seen. The birds would not be along snowbanks on a cold day but scat would be expected there (left on hot days when the birds congregated under snowbanks) since they summer has been predominantly hot. Absence of any sign of Ptarmigan strongly suggests that they do not occur in this valley (& perhaps not in these mountains. Meadow vegetation included: St. John's Wort, False Hellebore, Fringed Parnasia, Yellow Monkeyflower, Buttercup, Sedge, Phacelia, Pentstemon, Indian Paint Brush, Mtn. Sorrel, Fern, Red & White Heather, Cernica, Aster, Valerian, & Bog Asphodel.

August 8

Leigh Creek, Lincoln Co., Montana

Drove Gloria & Ruth to the Snowshoe Mine (next canyon south) (Gold, Lead, Iron - abandon) & spent remainder of day stuffing birds including 3 hrs on one that had been beautifully Taborized (mutilated by overshooting).

August 9

Leigh Creek, Lincoln Co., Montana to Fishtrap Creek, Sanders Co., Montana

Clear, hot weather. A day of exploring the southern end of the Cabinet Mtns. in hopes of locating alpine habitat & perhaps Traces of Black Rosy Finch ^{species} ~~forms~~ in the Cabinet Mtns.



Journal

R.E. Johnson
1967

August 9

Leigh Creek, Lincoln Co. to Fishtrap Creek, Sanders Co., Montana (cont.)

Drove north on Bear Creek Rd to US 2, then west through Libby to Bull Lake road and south on it to US 10A, then east to Thompson Falls. Just west of Thompson Falls a road turns off leading to Thompson Falls State Park and it branches with the right fork leading to a golf course. ~~The~~ ^{west} The right fork was followed _{west} to the Graves Creek Rd, a distance of 6 miles (4 mi. dirt). The Graves Creek road was followed to Vermilion Pass Rd (7 mi. (6000 ft.)) & the latter followed to Vermilion Pass (2.5 miles). The south slopes of the mountains are heavily timbered and have been logged over recently in many places. Logging roads lace the area. Signs on Vermilion Pass indicate: ⁴ ~~4~~ mi. to Headley Lookout (1st $\frac{1}{2}$ mile by road) along the ridge to the east; 5 mi. to Cougar Lookout (2 miles by road) to the west. I walked up to Vermilion Peak _(6682 ft.). A lookout tower had been present but was burned down. The top was grassy, but had been timbered, then cleared for the lookout. Trees include Spruce, Fir, Hemlock & White-bark Pine (mixed species). No solid stands of White-bark Pine occur. The north face is steep & occasional cliffs but not alpine cirques & no snow. A small lake can be seen to the nw with a sizeable diff above, but this is surrounded by dense timber. _(6694 ft.)

Cougar L. O. _(7054 ft.) can be seen from Vermilion Pk & is on a timbered ridge. Graves Pk _(ne of Cougar & higher) is steep on the east with some cliffs & sparse timber due to the rocky conditions. The north face cannot be seen.

Seven Point Mtn (6733 ft.) can be seen to the nw & is not timbered, but is an open grass ridge & has a lookout tower. IT

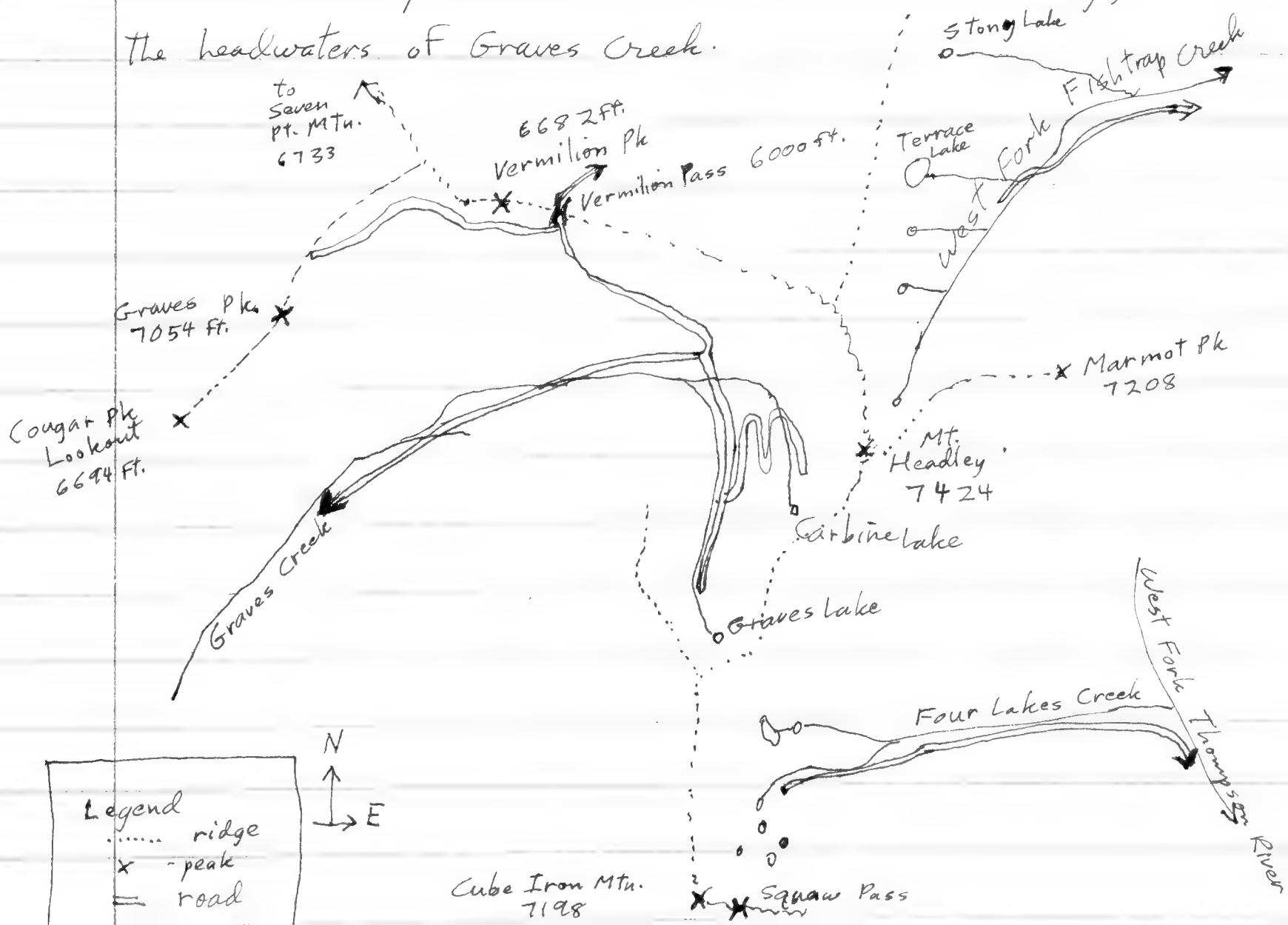
Journal

R.E. Johnson
1967

August 9. Leigh Creek, Lincoln Co. To Fishtrap Creek, Sanders Co., Montana is too far away to see further details. The topo (Wallace, Ida. (also Thompson Falls Quad, 30', 1937) 1:250,000; 1956) shows a number of lakes on its north side & some barren areas suggesting cirques, etc.

To the south & east all the peaks are heavily timbered except where too steep or rocky. ^{Mount} Headley ~~pk~~ (7429 ft) is the highest pk in the area & its west slope is round & timbered. Several rugged cliffs can be seen south of Headley near ~~the~~ Graves Lake.

Drove ^{back} down Vermilion Pass Rd to ~~the~~ Graves Creek Rd & followed the latter to roads end about a mile below Graves Lake. Hiked ^{up} crosscountry to Graves Lake (a shallow small lake surrounded by timber) & then south $\frac{1}{4}$ mile (or less) to rock slides & meadows along the base of tall cliffs (north facing) above the headwaters of Graves Creek.



Journal

R.E. Johnson
1967

August 9

Leigh Lake, Lincoln Co. to Fishtrap Creek, Sanders Co., Montana (cont.)

Only one patch of snow (5x10 ft.) remained in the shadows of these large cliffs. Timber grows along the tops of the cliffs. These are the most likely nesting sites of Rosy Finches seen so far, but they are rather low in elevation & consequently lack snow & have timber around them.

A mile from the end of this road is another leading toward Carbine Lake & Headley Lookout (road is 3 miles long). I was unable to locate the lake by following the signs. Goat hair was seen caught on a few branches along the upper part of the road. A trail leads to Headley Lookout & Peak from ~~the~~ near the end of the road. This appears to be the shortest of many possible routes to this "highest of peaks".

Drove back down Graves Creek Rd & then to Thompson Falls & east to Thompson River Road (1st 4-5 miles are paved) & up it to Fishtrap Creek & up it to Fishtrap Creek Campground (Mileage: 15 miles on Thompson River Rd + 10 miles on Fishtrap Creek Road).

August 10

Fishtrap Creek, Sanders Co., Montana to Pack River, Boundary Co., Idaho

Drove up West Fork of Fishtrap Creek and took road branch to rt. leading up toward Benson Peak. From high on this road the north faces of Headley & Marmot Peaks can be seen. Marmot pk (7208 ft.) is mostly densely timbered but has many areas of boulder slides on it. It is difficult to tell just where the high point of the ridge is located. One topo map indicates a lookout tower but this has been removed. Mt. Headley (7424)

Journal

R.E. Johnson
1967

August 10

Fishtrap Creek, Sanders Co., Montana To Pack River, Boundary Co., Idaho

is the highest peak in this area (souther Cabinets) and it looks like it could have some alpine fauna even though its west slopes are heavily timbered, as noted yesterday. There is a north facing cirque with abundant cliffs & snow. It remains possible that other such cirques exist along the east face of the ridge running north from Mt. Headley (map suggests steep cirques above small lakes), but these were not seen.

Returned ^(driving) down Fishtrap Creek, then south on Thompson River Rd, then up West Fork of Thompson River, and continued to end of logging roads on Four Lakes Creek. Several roads were left unexplored however. These lakes (Cabin, Pocuspine, Grass, Frog, & Knowles) lie in a basin on the ^{ne}~~west~~ slope of Cube Iron Mtn (7198'). There is a trail to Cabin Lake ^(2 miles) and another past the remaining four lakes & leading to Squaw Pass (east of Cube Iron Mtn). The country appears to be mainly heavily timbered & with little abrupt topographic relief, but the possibility of low cliffs along the ridge does exist. (see Thompson Falls Quad, 1937).

Maps covering southern Cabinet Mtns:

Thompson Falls Quad, 1937	30 min.	} topo.
Wallace, Idaho. 1956	1:250,000	
Thompson Falls Ranger District, Lolo Nat. Forest 1966		

Drove back to Thompson River Rd. & Then to US 10A & west to Sandpoint, Idaho, and north on US 2 to

Journal

R.E. Johnson
1967

August 10

Fishtrap Creek, Sanders Co., Montana to Pack River, Boundary Co., Idaho
the Pack River Rd. Followed this road to the Chimney Rock Rd (West Branch Rd) & followed the later to the Pack River crossing (bridge) where camp was set up.
(see Selkirk Mtns, August 2, 1967. for mileages, etc).

August 11

Pack River, Selkirk Mtns, Boundary Co., Idaho

Drove to end of Pack River Rd and hiked 2 miles to Harrison Lake (6000+ ft.) over the Priest Lake Divide Trail (a jeep road ^{& no. side} for 1st 1.5 miles, then 0.5 miles of trail). The east end of the lake is in timber, but remainder is open. The trail leading to the lake ^{first} passes through a cut now abounding in Fireweed, Elderberry, Everlasting, and Paintbrush. Oregon Juncos, Red-shafted Flickers, Olive-sided Flycatchers and Chipmunks were seen in this area. Approaching higher elevations, sparse timber (Fir & White-bark Pine) contained Townsend Warblers, Mtn. Chickadees, Audubon Warblers, & Oregon Juncos.

The west end of Harrison Lake is more alpine & rock slides & glacial polished rock extend down to the lake edge. Rock is granitic, with pegmatite like formations in places which include "book" mica, and a white feldspar. There is a cirque to the south with considerable snow and some meadows (Cassiope, white Phyllodoce, Penstemon ellipticus, False Hellebore, Senecio, St. John's Wort, Sedge, and a few ^{small} fir trees. Birds included Clarke Nutcracker, Pine Siskin, and Oregon Junco. Clouds were pouring overhead at 2 PM & rain was

Journal

R.E. Johnson
1967

August 11

Pack River, Selkirk Mtns, Boundary Co., Idaho (cont.)

falling further north in the range (clouds from south).

I continued upwards (sw) to the ridgetop and followed it ^{south} over a number of peak tops with cairns. The west slope was open timber (White-barked Pine) and creeping Juniper, the east slope is mostly vertical cliffs with talus slopes ^{snow} & meadows below. Both red and black ants (some winged) occupied the summit cairns. At 3:30 PM a Water Pipit was collected on the top of the 1st pk ~~south~~ ^{north} of Twin Pks (jct of main N-S ridge & a ridge running east separating Little Harrison Lake & Beehive Lake). Hoary Marmots, Songs, & Chipmunks were noted in the cirques below (east of ridge) & Mt. goat wool was noted. I also circled back & forth on the meadows below & saw no sign of additional pipits. A short ways se. of the location of the Water Pipit, a family of Gray-crowned Rosy Finches (tephrocotis - like head pattern) were found. They fed on the ground (so. facing) amid Beargrass, dry Glacier Lilies, and St. John's Wort. Young fed themselves most of the time but also begged & were fed by adult. One ♀ and 3 Imma. were collected, 2 young were not collected. Only the one adult was seen. Once the adult was shot, the remaining 2 young ceased feeding and simply sat about looking quietly (and allowed close approach). When the adult was alive feeding was active, chirping common, & approach closer than 100 ft. impossible. A Tree Squirrel was seen in the same

Journal

R.E. Johnson
1967

August 11

Pack River, Selkirk Mtns, Boundary Co., Idaho (cont.)

area (no timber near). Bear scat (huckleberry filled) was also seen. Grouse scat was seen on the ridge above (Ptarmigan or Blue Grouse).

I was finally chased off the mtn. by lightning & rain. Took a cross country route ^{east} above Little Harrison Lake & gradually down slope but staying on rock & above brush until almost down to Pack River Rd level. Took one hour from top to car.

The area around Twin Peaks had more ^{& meadows} snow than the area closer to Harrison Lake. Further south Mt. Roothann appears to have steep cliffs & considerable snow around north facing cirques.

August 12.

Pack River, Selkirk Mtns, Boundary Co., Idaho (cont.)

Hiked up toward Chimney Rock but the route turned into a confussing series of logging trails with no^e indication of the correct route and then brush wacking to follow these. I turned back at noon after a leisurely hot morning wandering through the cut over areas.

Mixed flocks of Oregon Juncos, Golden-crowned Kinglets, and Mtn. Chickadees were seen in White Pine - Fir forest at 4500ft. Higher, in the cuts, Pine Siskins, Townsend Warblers, Red-breasted Nuthatches, Stellers Jays, Red-shafted Flickers, Robins, Pine Siskins, Olive-sided Flycatchers, Mtn. Chickadees, Oregon Juncos, Cassins Finches, Western Tanagers, Rufous-sided Towhees, and Pine Grosbeaks were seen. A pigeon with white in the wing flew from

Journal

R.E. Johnson
1967

August 12 Pack River, Selkirk Mtns, Boundary Co., Idaho (cont.)
 a tree & was quickly out of sight. A
 hen Blue Grouse with $\frac{1}{2}$ grown young was
 located by her clucking as I approached along a
 logging trail. A drumming sound led me to a
 male only 100 ft distant which had fanned
 tail + ^{colorful} expanded neck pouches. Drumming sounds
 seem to involve these pouches + not the wings
 beating on a log. Two Canada Jays were collected.
 Spent the afternoon skinning birds collected
 on August 11 & 12.

~~August 13 Selkirk Mtns to Pleasant Valley Campground~~

Maps for Selkirk Mtns. are very poor:

① Priest Lake Ranger District, Kaniksu Nat. Forest

1 inch = 4 miles

② Sandpoint 1:250,000 1958 Tops

August 13 Selkirk Mtns to Pleasant Valley Campground, Lincoln Co, Montana

Drove back to US 2 & south to Sandpoint (due
 to apparent car troubles — found no VW dealer)
 + then north on US 2 through Bonners Ferry &
 through Libby to Pleasant Valley Campground, 33 miles
~~east~~ east of Libby. Took one side trip up the Yaak
 River to Yaak & also up Pete Creek Rd. Was forced
 to turn around because of low compression (valves) &
 barely crept back to highway. Had hoped to
 recheck the Northwest Peak area for Rosy Finches.

August 14 west to Kalispell, Flathead Co., Montana

Journal

R.E. Johnson
1967

August 14 west to Kalispell, Flathead Co., Montana.

Drove all morning at a snails pace & reached Glacier Motors (VW dealer) east of Kalispell on US 2 around noon. Obtained a hotel room & rented a Hertz Car for 24 hrs. Drove to Glacier Park to return the Sharpe girls to their camp (they have been with me since August 5). Heard gossip about 2 girls killed by ~~separate~~ Grizzly Bears at 2 locations in Glacier Park.

August 15 Kalispell, Montana

Valve job done on VW while I suffered in heat. Drove to Glacier in VW at 6 PM.

August 16. Glacier National Park, Montana to Missoula, Montana

Drove to Headquarters (From Avalanche Campground) and talked to Dan Henning (Ph.D Syracuse; now prof of Political Science at Eastern Montana College, Billings - a ^{politics of} conservation specialist) and Chief Naturalist Elmore. Drove south on US 2, then Mont. 35, then US 93 to Post Creek Store ($4\frac{1}{2}$ miles no. of St. Ignatius) where my car clattered to a stop (rods out apparently). Unhappily I was towed to Missoula to Universal Motors (VW dealer). Got a Hotel (cheap - Lenox Hotel \$3) on Broadway St.

August 17 Missoula, Montana.

A day of odds & ends - mostly odd.
VW - can't be worked on until Monday (Aug. 21)
& due to my rebuilt engine, parts may be hard to get.

Journal

R.E. Johnson
1967

August 17

Missoula, Montana (cont.)

MA Thesis - went over the thesis with Dr. Templeton. It is now ready to mail to Comparative Biochem. & Physio. for publication.

John Mugaas offered to lend me a car until mine is repaired.

I would have to license & insure it.

Dr. Hoffmann recently returned from a meeting of the Interuniversity committee on ~~and~~ sending US researchers to Russia, etc. Apparently they are having difficulty ~~and~~ getting enough applicants. My chances to go appear good. The committee furnishes the transportation + expenses (minimal) there & makes the arrangements.

August 18

Missoula, Montana

After working out plans to use Mugaas' car, I found out Universal Motors had decided to do my car earlier. It was ready at 5:30 PM. Approx. \$200. Ugh! 4 new pistons & cylinders + bearings & rods + crank shaft.

Caught up on mail, bought groceries, called MVZ.

August 19

Missoula, Missoula Co. to Racetrack Peak, Granite Co., Montana

Drove from Missoula east via US10 through Drummond, Garrison, Deer Lodge to Racetrack (2 miles no. of Galen) & turned west on a dirt road marked: 12 miles to Racetrack Campground. The road crosses railroad tracks & passes a bar & then reaches an unmarked junction. The left road is the correct one. Many unmarked Jct's follow but the critical ones (turns) are usually marked. The road continues ^(4 miles) past the campground to Danielsville (abandoned mining town) & 3 miles beyond ^{Danielsville.} ~~this~~ reaches a Jct with a trail to Racetrack Lake. Signs read as follows:

Journal

R.E. Johnson
1967August 19 Missoula, Missoula Co. to Racetrack Pk, Granite Co., Montana (cont.)

Indian Meadows	2.5 miles	} trail to left.
Mud Lake	4	
Racetrack Lake	7	

Albicaulis Lake	2	} road to right
Alpine Lake	2.5	
Hidden Lakes Trail	2.5	

The jct is near a small creek and there are a couple camp sites. The main creek is through the trees to the south. The road from here on is rough, loose, & steep & my VW couldn't get sufficient traction to make it, so I parked at the jct & packed up the road. Both Albicaulis & Alpine Lakes have earth dams & the water level is down leaving ugly shore lines. Apparently there were natural lakes in these locations prior to the dams however. Timber surrounds both lakes. None of my maps indicate roads going much beyond Danielsville. The road to Alpine Lake branches to the right at a creek crossing just prior to reaching Albicaulis Lake. A trail leads from Alpine Lake north over Hidden Pass (1 or 1.5 miles) & down into the head of Rock Creek drainage (Hidden Lakes). The trail is in timber all the way to the pass & crosses 2 creeks in route. The trail doesn't break into the open until the north lip of the pass is reached. Then the trail descends a steep slope via switchback to about a dozen lakes & ponds below. Racetrack Peak (9524 ft.) lies west of the pass (8400 ft.) and is easily reached

See : Bamberg & Major, 1968 Ecolog. Monog. 38(2):160-163 ~~for~~
for detailed list of plants in alpine of Flint Creek Range. →

Journal

R.E. Johnson
1967

August ~~18~~¹⁹ Missoula, Missoula Co. to Racetrack Pk., Granite Co., Montana (cont.)
 by walking directly up the ridge. I set up camp about half way to the top of the peak next to a spring which feeds a pond (now dry) at the lower end of the meadow. Sparse timber (Alpine Fir, White-bark Pine, Larch) fringes the meadow on all but the west side which is a steep rockslide leading up to the peak. Mosquitos were too common at the pass & all locations above. Two very small (max. dimension 10 ft.) snow patches remain near the top of the peak on the east slope. Below the ridge (From Pass to Peak) on the north side were several larger snow patches below cliffs. Vegetation along the ridge included: Red Heather, Dwarf Huckleberry, Penstemon ellipticus, Creeping Juniper, Yarrow, Lupine, Dryas, Arnica, Phlox, Blue Gentian, Scrubby Cinquefoil, ~~E~~ Mtn. Harebell. Birds included: ^{Water Pipit,} Clark's Nutcracker, Oregon Junco, Pine Siskin (flocks of 3-6), Mtn. Bluebird, and Rosy Finch. Grouse droppings were also seen. Pikas & Golden Mantled Ground Squirrels were common. Three Imma. and one adult ♀ Rosy Finch were collected, along with 2 Water Pipits, all along the upper part of the north facing cliffs. Many more Rosy Finches were present. I continued on to the top of the peak & found a max-min. thermometer in the cairn & I reset it.

August 20 Racetrack Pk., Granite Co., Montana To Butte, Silver Bow Co., Montana

Collected Rosy Finches on east slope of Racetrack Peak. Had 6 adults by 10AM and 10 adults & 1 young by 2PM. There were many family groups and I attempted to collect only the adults. They look mostly like atrata but there may be some intermediates. Also collected

Journal

R.E. Johnson
1967

August 20

Race Track Pk, Granite Co., to Butte, Silver Bow Co., Montana (cont.)

one Imma. Water Pipit and one Sage Phoebe. Also seen: Pine Siskin, Water Pipit, Mtn. Bluebird, Violet-green Swallows (10:20 AM), Rock Wren (10:35 AM), Pika, and a shrew. I returned to the top of the peak & read the thermometers: 32° was Min. last night and it was 64°F at 12:05 PM. The ~~top~~ cairn had flying ants (some black, some red) all over it. The south slope of the peak is hot & dry and is jumping with grasshoppers. The meadow on which I camped is nearly dry. Plant species includes Parvassia, Gentian, Bistort, Thistle, Aster, Heather, Rushes.

Hiked back to the car & drove to Butte. Purchased ice to keep my 19 birds, then cleaned up & went to evening church.

August 21

Butte, Silver Bow Co., Montana

Rain threatening. Stayed in Apex Hotel and stuffed birds all day.

August 22

Butte, Silver Bow Co. to Prickly Pear Creek, Jefferson Co., Montana

Continued stuffing birds, picked up mail, then drove to Helena for date with Roberta Peterson, then drove 7 miles up Prickly Pear Creek (creek road is about a mile south of Jefferson City on US) & camped.

August 23

Elkhorn Pk and Crow Pk., Jefferson Co., Montana

Drove 6 more miles up the Prickly Pear Creek Rd (very rough) to ^(7600 ft.) Upper Tizer Lake. Stuffed birds and then hiked to peaks in search of Rosy Finches. Took a good trail to west, ^(8200 ft.) from camp area leading to Hidden Lake (green, shallow, eastern brook trout (warm water) & then hiked up the ridge to the south & followed it west, then north to Elkhorn Pk (9381 ft.). The ridge (so.) was covered with White-bark Pine & spruce. Ground cover was Red Heather. Clark's Nutcrackers were common. As the ridge is followed west timberline is reached & more rocky terrain continues to the top of the peak. ~~On the~~ On the ridge south of the peak a ~~skull~~ ^{snowshoe rabbit} skull was found, & Conys were common. Three small

R.E. Johnson
1967

Journal

August 23 Elkhorn Pk and Crow Pk, Jefferson Co., Montana (cont.)

(max. dimension = 8 ft) snow patches were located on the ne side of the pk and one (10 x 80 ft.) on the se. A Mtn Goat was seen in the vicinity of the latter patch. Audubon's Warblers were common along the ^{upper} eastern slopes of the peak. Reached the top of the pk at 4 PM. A Wilson Warbler and ~~several~~ several Immature White-crowned Sparrows + Juncos were seen in a stand of White-bark Pine se of the pk. top. Further down slope to the se. a Townsend Warbler was seen with a flock of Audubon Warblers in ~~pine~~ trees. Chipmunks are common along the ridges. Elkhorn Peak has no cliffs but is steepest on the east face overlooking Hidden Lake. There is some low ^(4 inch) vegetation between the rocks on top. This is now very dry. A small patch of thicker turf was located down the nw slope above the Iron Mine.

The ridge continues se from Elkhorn Pk to an unnamed peak (9240 ft.) located directly south of Hidden Lake. A lower ridge continues from this peak in a ne direction headed directly toward the Tizer Lakes. [It is the end of this ridge which forms the high cliffs seen from the Tizer Lakes]. The north face of this peak & ridge is vertical cliffs which may be suitable for Rosy Finch nesting. I did not investigate these cliffs. Directly south of this peak is Crow Peak (9414 ft.) the highest point in these mountains. I arrived there at 6 PM. There is a large barren cirque formed by the north face of Crow Pk & the ridge running north from this peak. There are many small ponds & lakes visible below the cirque, the largest being Glenwood Lake (blue, fairly ~~deep~~ ^{shallow} deep, cutthroat trout) (at 8200 ft.). Crow Peak has the most extensive ^{alpine} turf seen

Journal

R.E. Johnson
1967

August 23

Elkhorn Pk & Crow Pk, Jefferson Co., Montana (cont.)

anywhere in these mountains. ~~There~~ ^{It is} especially well developed on the nw & south slopes. One Water Pipit was seen near the top of the peak and Audubon Warblers & Pine Siskins were seen in the few clumps of white bark pine on the se. A Mtn Goat grazed on the south turf. The north facing cliffs of this peak are the most alpine location seen along this traverse. Plants ~~included~~ ^{included}: Skunkweed, Spotted Saxifrage, Aster, and Eriogonum. Partway down the cliffs a Red-shafted Flicker primary feather was seen. An adult Rosy Finch (looked like ♀ atrata) with 2 young were seen & pursued along the cliffs. A Pine Siskin was collected by mistake (with Rosy Finches). An Audubon Warbler & a Water Pipit were collected in the same location. Pine Siskins & Audubon Warblers were the most common birds on the mtn. Water Pipits were most common toward the base of the cliffs. An Immat. Golden Eagle flew agilely back & forth in front of the cliffs & was pursued by a rosy finch. Darkness & thunderstorm chased me away from the Rosy Finches at 8:30 PM. Hiked cross country across boulder slides back to camp (north).

August 24

Crow Peak, Jefferson Co., Montana

Returned to the cirque north of Crow Peak to try to collect the Rosy Finches seen yesterday. Robins, Clark's Nutcrackers, & an Olive-sided Flycatcher were noted near camp (upper Tizer Lake) before starting out. Mtn Chickadees, Red-breasted Nuthatches & Audubon's Warblers were seen in firs in route. The cirque is mainly filled with large boulders & rocks but occasional patches

Journal

R. E. Johnson
1967

August 24

Crow Peak, Jefferson Co., Montana (cont.)

of White-bark Pine or meadow occur. Two small springs drain into a pond near the lower end of the barren cirque. Water Pipits were noted on the floor of the cirque below the west wall (actually a talus slope). Audubon's Warblers, Pine Siskins, ~~the~~ Clark's Nutcrackers, and a Mtn. Bluebird were seen higher up the west slope where a few tree clumps occur.

Chipmunks, Golden-mantled Ground Squirrels, & Conys were common. A Golden Eagle flew past the cliffs at 2 PM & ^{many} Pikas called out warning notes. Rosy Finches were followed east & west, back & forth all day until 3:25 PM when an adult ♀ & 2 young were collected. Since this was the same number seen yesterday & on each sighting today, it was assumed that these were the only finches present. However a few minutes after these were collected another rosy finch chirp was heard but could not be located.

Additional plant species on the cirque north wall include: Forgetmenot & Mtn. Sorrell and on the cirque floor: Speedwell, & Shootingstar.

A Water Pipit & Oregon Junco were collected near the spring on the floor of the cirque on the return trip. A Pine Grosbeak & a Cassin's Finch were seen in the forest near camp. ~~and~~

Maps covering the area include:

White Sulphur Springs 1:250,000 1965 Topo

Journal

R. E. Johnson
1967

August 24 Crow Peak, Jefferson Co., Montana (cont.)

Clancy 15 min. series 1950 topo

Boulder District, Deerlodge National Forest 4 inch. to mile

August 25 Tizer Lakes, Jefferson Co., Montana to Helena, Lewis & Clark Co., Montana

Stuffed birds until afternoon, then drove back to Helena to see Roberta and plan a trip together the next day. Camped west of town along US 12.

August 26 Helena, Lewis & Clark Co. To Mt. Edith, Big Belt Mtns, Broadwater Co., Montana ^{to return}

Drove south on US 12 to Townsend, then east on US 12 toward White Sulphur Springs but turned left (north) on a dirt road (No. Fork Deep Creek Rd) and followed it to Trail No. 20-C. The sign at this jct. reads: Mt. Edith 4 miles; Edith Lake 5 miles. The first 1½ miles of the trail may be driven & we did (lazy). This leaves you in timber. The trail breaks out in the open in another mile. The trail crests the ridge between Mt. Edith (to the Rt.) and Mt. Baldy at a point only a few tenths of a mile west of Mt. Edith. Mt. Edith appears rounded with a sparse turf covering parts of its rock pavement type top. Since no cliffs or snow patches were visible on Mt. Edith, I assumed Rosy Finches would be rare or absent and therefor I headed west along the ridge toward Mt. Baldy which has steep cliffs & large snow patches on the NE face. The north sides of the ridges leading toward Baldy also cliffs or steep boulder slides leading down toward lakes. The remainder of the day was spent along the tops of some of these ridges. Most of the ridges are considerably lower than the afore mentioned peaks and they have scattered stands of short, wind-blown White-bark Pine, with a few spruce & fir mixed in. Plants include: Fireweed (appears to be the tall low elevation

Journal

R.E. Johnson
1967

August 26 Helena To Mt. Edith, Big Belt Mtns, Broadwater Co, Montana to Helena
species rather than the alpine species), Lousewort, Lupine, Heather
(red?, dry), Penstemon virgens, dwarf Huckleberry, yarrow, Geum rossii
(similar to that found on Elk Horn Peak on Aug 23-24), stonecrop,
Mtn. Harebell. The following bird species were seen: Clark
Nutcrackers, Pine Siskin, White-crowned Sparrow, Ruby-crowned
Kinglet, Audubon Warbler, Chipping Sparrow, Oregon Junco, Water Pipit.
An Immature Kinglet was collected. Mammals included: Chipmunk,
Pocket Gopher (workings only), Golden-mantle Ground Squirrel. The
north side of the ridge is a rock slide with some trees midway
down and Edith Lake (8100 ft.) at the bottom. There are no
cliffs & only one snow patch. Rosy Finches probably wouldn't nest
in this location. A ridge (located west of Mt. Edith about 1 mile)
runs north from the main EW ridge & passes above (west) of
Edith Lake. This ridge is densely timbered ^{on top} with very low scrubby
White-bark Pine & also has a few patches of rock pavement & turf.
The east face (above Edith Lake) has many near vertical cliffs
but they are mostly se facing & thus perhaps too warm (as
well as too low) for rosy finches. Long periods were spent
along the tops (or a short ways down slope) of these ridges
listening for rosy finches but none were found. On the south
side of the main N-S ridge, not far west of where the trail
crosses the ridge, is a sizeable cirque with meadows at the
bottom (still green) & 2 large snow patches, much to my surprise.
Mt. Sorrel, Paint Brush, Aster, & 3 species of Heather (red & white
Phyllodoce and white Cassiope) grow here. Clark Nutcrackers & Water
Pipits were common, but no Rosy Finches were heard. This was the
best location I've seen for rosy finch foraging at this season.

Journal

R.E. Johnson
1967

August 26

Helena to MT. Edith, Big Belt Mtns, Broadwater Co., Mont. to Helena

Lastly I hiked up MT. Edith^(9504 ft.) and discovered that it was more alpine than I'd expected (but no cliffs or snow). The turf is well developed & hummocky and consisted of many species including: Harebell, Cinquefoil, Lupine, Carpet Pink, Bush Cinquefoil. Many Water Pipits (2 collected) and a few Horned Larks (1 coll.) were seen and one Rosy Finch was scared up (& away) when I fired at the Horned Lark. Considerable distance down the ne. slope are cliffs which apparently drop into a lake (judging from maps) but the lake couldn't be seen from near the top. Maps: ① White Sulphur Springs 1:250,000 1965 {the only topo of the area} ② Helena Forest Map (borrowed from Roberta)

Returned to the car and back to Helena.

August 27

Helena to Big Baldy Mtn, Little Belt Mtns., Judith Basin Co., Montana

Stayed at a decrepid hotel downtown & got up late. Drove via US 12 through Townsend and White Sulphur Springs & then north on US 89 to Kings Hill Pass, then on the Dry Wolf dirt road past Kings Hill & north to Big Baldy Mtn. (9175). The road ends about one mile from the top of the peak at an ecotone between a grassy park on the ridge top to the south and a stand of big White-bark Pine fringing Big Baldy Mtn. This is a good campspot & the spring is ^{still} running. I hiked to the top of the peak up rock slides & pavement (mostly 1 ft. diameter rocks). The top has a good turf of sedge & lupine. ~~Other species include~~ Yarrow, Mtn. Sorrel, Willowweed, Arnica, Mtn. Harebell, & Chickweed are found along the top of the big cirques the form the east face of the mountain. The N, S, & W slopes are all rounded. The southernmost cirque drops down to Rhoda Lake (8255 ft.) and is very alpine (no trees, many snow patches) but is not

Journal

R. E. Johnson
1967

August 27

Helena to Big Baldy Mtn., Little Belt Mtns, Judith Basin Co., Montana

so steep as the second (northern) cirque. There are some near vertical cliffs facing north above Rhoda Lake but otherwise the slopes are ^{very steep} rock slides. The northern cirque is also very alpine & has very large cliffs on the ~~sw~~ corner (ne. facing) with a very large snow pack below. This cirque is subdivided into 3 parts & has two lakes [Twin lakes (8015 & 7870 ft.)] below. The central (main) cirque is the most likely nesting site for Rosy Finches. Water Pipits were very common, apparently in family groups, along the top & they fled to cover inside the lip of the cirques when the wind periodically blew from the sw. [Thunderstorms continually passed over from 3-8 PM]. A Water Pipit and a Sprague's Pipit (Imma.) were collected on Big Baldy Mtn. This is the first record for a Sprague's Pipit above the foothills of the range. (see Hoffmann, 1960 - Summer Birds of the Little Belt Mtns, Montana). Perhaps these moved up after breeding was past. Only one group of 5 or 6 was noted. Hoffmann notes that pipits (water) are common on Yogo Pk but less common on Big Baldy. This conforms to my observations ~~for~~ for the summer of 1964 (see Johnson, 1966 - Wilson Bull. 78: 225-227) when they nested in great densities on Yogo Pk. However this Fall Water Ppits are very common on Big Baldy. My only previous visit to Big Baldy was in early August 1964 & Hoffmann's last visit to these mtns was Aug. 20 (but he perhaps didn't visit Big Baldy Mtn. this late), so perhaps Water Pipits move to Big Baldy in the fall. A Horned Lark was also collected. Several Say's Phoebes were seen and one was collected along the cirque tops. This is the 1st record for this species within these mtns, although it

Journal

R.E. Johnson
1967

August 27

Helena to Big Baldy Mtn, Little Belt Mtns, Judith Basin Co., Montana

occurs in the grasslands surrounding the mtns (see Hoffmann p. 17).

I also noticed them in the Flint Creek Range (& collected one) on Aug. 20, suggesting that they may commonly move up slope in the fall. One family of Phoebees was seen. A flock of Pine Siskins (7 birds) flew overhead at 3:15 PM. A family (5) of Robins was seen along the lip of the northern cirque. ~~It~~

~~appears~~ An Audubon Warbler was also seen in the same location. These had previously be noted by me at high elevations on Elkhorn & Crow Mtns & in the Big Belt Mtns this fall. It appears that Sprague's Pipits, Say's Phoebees, Pine Siskins, Robins, and Audubon Warblers may all move to higher elevations after the breeding season. A Cooper's Hawk was seen flying over the ^{no.} cirque & then perching on a cliff top. ^{1st alpine record} A number of Clark's

Nutcrackers followed it, harassing it & also a few Rosy Finches joined the chase. One Rosy Finch (an Imma. well advanced toward adult plumage) was collected along the lip of the south cirque and 6 (2 adults) were collected along the tops of the sw cliffs of the north cirque. The finches were abundant in the north cirque but were hard to reach (cliffs). Only the one bird was seen along the south cirque. Neither cirque was descended except to retrieve fallen birds. Rosy Finches occasionally fed on the turf ^{above the cirque} with the pipits & also fled for cover from strong winds with them. One White-crowned Sparrow was seen in a small bush along the ^{cirque} rim. On returning down the mtn. at dusk a Common Nighthawk was heard overhead (on south slope of Big Baldy well above timberline). This is only the second record for this species in the alpine here (see Johnson, 1966). Mammals

Journal

R.E. Johnson
1967

August 27

Helena to Big Baldy Mtn., Little Belt Mtns, Judith Basin Co., Montana
observed include yellow-bellied Marmot, Cong., and chipmunk.

August 28

Big Baldy Mtn to Kings Hill Campground, Little Belt Mtns, Montana

Decided to explore the ridgetop parks + Yogo Pk to fill in the general fall picture of alpine bird life since yesterday proved so fruitful. Would also like to have had time to re-climb Big Baldy Mtn, but did not. Noted Clark's Nutcracker drinking at the waterhole near camp at 11 AM. Ridgetop parks between Big Baldy Mtn + Tepee Butte (8000 ft \pm 200 ft.) are grassy and include yarrow, mtn. harebell, shrubby cinquefoil, + gentian (Sweetia). White-bark Pine occurs along the margins + lower down the sides subalpine Fir appears among the pines. Vesper Sparrows + Pine Siskins were seen where the road passing around the base of Tepee Butte (8248 ft.; birds at 8000 ft.). Yogo Peak is still green + moist near the Pipit meadows where I camped in 1964, but is dry on all open slopes where springs are absent. The big snowpatch below the road (east facing) located west of the peak is now small but present + a large number of shooting stars occur below it. An Audubon Warbler + a Golden Eagle were seen at 1:20 PM at the top of cliffs above Elva cirque (east face of Yogo Pk.). Two snow patches remain in the cirque. The lower lake was nearly dry, the upper one is full. Several marmots were noted. Hugh's sheep herds are on the mtn + due to move back down the mtn (north) tomorrow. A Clark's Nutcracker ate snow from the dirty snow edge (also contained red algae) at the head of the cirque. White-crowned Sparrows + Water Pipits were seen, the latter just above the cirque. Water Pipits were entirely absent from

Journal

R.E. Johnson
1967

August 28

~~Notes~~ Big Baldy Mtn to Kings Hill Campground, Little Belt Mtns, Montana
the moist meadows where they had nested so ~~often~~ commonly in 1964. No Sprague's Pipits were seen. The following species were seen on Cabin Mtn (8163 ft.) south of Big Baldy Mtn: Say's Phoebe, Oregon Junco, Clark's Nutcracker, & Horned Lark (1 collected). The next park south (sw) of Cabin Mtn. also possessed Say's Phoebes, Horned Larks, and also Vesper Sparrows (1 collected). Say's Phoebes were also seen in the park directly west of Coyote Pk. A Horned Lark was collected and several were seen in the park se of Kings Hill at the road junction. Drove down to Kings Hill Campground on US 89 and camped and stuffed birds. Was visited by a cute girl from Calif. traveling with her parents to Glacier, Banff, etc. Wish I could go along!

August 29 Kings Hill Campground to Butte, Montana

Drove back through White Sulphur Springs then took a dirt road over the Big Belt Mtns (over Duck Creek Pass) to explore possible routes to ~~Big~~ Mt. Baldy from the north & to Boulder Pk (north of pass). Noted the following signs:

From the rd at a point east of the pass — Trail 20B

Gile Res. 0.5 (by road)

Big Birch Cr. 2

Baldy Lakes 8

Edith Lake 10

From the top of the pass — Trail 20-C

Mt. Baldy

Edith Lakes

No. Fk. Deep Creek

} no mileages. Trail begins as a steep road & my vw could go less than a mile along it.

Journal

August 29

Kings Hill Campground to Butte, Montana

north west of the pass: A road going north

Stove Camp. 2 miles

Boulder Baldy 6 "

Boulder lakes —

I didn't follow this road, but it looks good.

It is 13 miles from Duck Creek Pass via ~~the~~ dirt road to the valley bottom on the west. From there it is 14 miles via paved road south to Townsend. I then drove south via US 287 to Interstate 90 & followed this to Butte. Picked up mail, did laundry, got boots repaired, took clothes to cleaners, and bought groceries. Drove

on US 91 to Elk Park Campground and skinned birds & camped.

August 30

Elk Park Campground to Red Mtn Lookout, Silver Bow Co., Montana

Continued stuffing birds, drove to Butte & then south via US 10 & into Highland Mtns via Roosevelt Drive. Drove to Highland (Red Mtn) Lookout & was surprised to find the VW could make the steep loose rocky road at that altitude. Also surprised to find a cute girl lookout! (Suzanne Goodman, U. of Montana forestry major). Spent the night in the lookout tower basement amid the buzzing radio equipment.

August 31

Highland Mtns, Silver Bow Co., Montana

Suzanne cooked breakfast & we gabbed till afternoon.

Saw a Sparrow Hawk from the tower, at 10 AM. Finally ate lunch & took off up slope over ~~Red Mtn~~ ^(9700 ft.) Red Mtn.

(10,070 ft.) Monument Pk (10,136 ft.) to the head of the cirque ridge top above & so. of Emerald Lake (lake at 8740 ft.) & just west of Table

Journal

R.E. Johnson
1967

August 31

Highland Mtns, Silver Bow Co., Montana (cont.) [± Madison Co., Mont.]
 Mtn (10,223), the highest in the range. Saw Water Pipits, Pine Siskins,
Clark Nutcrackers, and Audubon's Warblers between Red Mtn &
 Monument Pk along the ridgetop. Timberline is at 9000 ft
 (± 200 ft.) so that the L.O. & all of the days hiking was
 well above timberline. The mtns are barren except for small
 herbs growing in the extensive talus slopes (talus slopes ~~cover~~^{cover}
 90% of the area observed) & a few patches of good alpine turf.
 Therefore the birds previously mentioned were not in ^{or near} trees but
 on rocks & cliffs. Cliffs are few however, limited to a
 few near vertical ones in places at the head of the cirque
 above Emerald Lake and ^{some} more gently sloping rock faces
 on the ne slope of Monument Pk. Turf was found on
 the ridgetop so. of the cirque & up a so. running ridge from
 there (max. elevation 10039). Species included: Lupines,
~~Germ rossii~~
~~Cinquefoil~~ (same species as seen in Flint Creek Mtns, Elk Horn Pk, & Big
 Belt Mtns) (pinnate leaves), Spotted Saxifrage, Carpet Pnk, & Eriogonum.
Conys & Golden-mantle Ground Squirrels were seen nearby in rock
 slides. A Rock Wren was heard on a sw slope. Fish were
 jumping in Emerald Lake. Yellow-bellied Marmots were seen ~~in~~ on
 the slides above Emerald Lake. Plants on rockslide above Emerald
 Lake: Aster, Arnica, Red Heather, Mtn. Sorrell, Speedwell, Sedge,
Penstemon virens, Buttercup, Parnassia, Paint Brush, Senecio, & White
 Heather (Cassiope). A few snowpatches remain on north slopes.
 Hiked down to Emerald Lake which is at Timberline. Rockslides
 come down to the waters edge on the w & so, and
 nearly reach the water on the south. A small meadow fringes
 the south shore. The east shore has a forest of spruce,

Journal

R.E. Johnson
1967

August 31

Highland Mtns, Silver Bow Co., Montana (cont.)

lodgepole, subalpine fir, & white-bark pine. Audubon's Warblers fed along the shore line and in trees. An Oregon Junco was also seen. Ravens were seen along the ridge when returning to the lookout at 7 P.M. Skunkweed is common along the ridge. A lightning storm was passing over thus prompting my early exodus. No sign of Rosy Finches. Water Pipits were the most common bird.

Camped outside the lookout tower in the wind & away from the buzzing radios. Suzanne furnished another good meal and we watched TV (Billy Graham From England & "Do Blonds have more fun?" with Al Capp as MC — Suzanne is a blond).

Sept. 1

Red Mtn. L.O., Highland Mtns, Silver Bow Co., to Lost Creek State Park, Deer Lodge Co., Montana

Suzanne prepared breakfast as a Rosy Finch flew over the lookout. I collected a lone Juv. on the ~~one~~ facing talus slope of Red Mtn. at 9400 ft. After breakfast further search turned up one or two small (4-6 birds) groups of Juv. Finches but no adults. Water Pipits were common and one Sparrow Hawk was seen. This slope looks better than most in these mtns for feeding (scattered herbs) flocks. Plants were mainly skunkweed, spotted Saxifrage, & lupine.

The Maps for this area are:

Twin Bridges Quad 15 min. 1960

Pipestone Pass 7.5 min. 1963

Drove to Butte to pick up clearing & then to ~~Missoula to~~ return items borrowed from School of Mines to see Mrs Peck

Journal

R.E. Johnson
1967

Sept. 1

Red Mtn. L.O., Highland Mtns, Silver Bow Co., to Lost Creek State Park, Montana
(Librarian) & to get maps at Montana Bureau of Mines. Drove to Lost Creek State Park in Deer Lodge Nat. Forest on the east side of the Flint Creek Range. Camp empty (fire closure) & creek & Lost Creek Falls cold & full. Located the amazonstone vein beside the falls & obtained specimens (very faded green). Stuffed the 2 birds collected this morning.

Sept. 2

Lost Creek State Park to Glacier National Park, Montana

Drove to Missoula to return items borrowed from Dr. Hoffmann & then to Bigfork to see Dr. Rowan & on to Glacier Park. The Sharpes were camped at Apgar Campground. The Glacier Wall Fire had crossed the Logan Pass Rd & the road is closed.

Sept. 3-12

Glacier National Park, Montana

Did no collecting & did not visit the alpine zone. The whole North Fork District of Glacier Park is closed due to high fire danger and the Going-to-the Sun Rd over Logan Pass remained closed due to ^a fire. All the Montana National Forests were closed also, thus no collecting was possible. Worked at Park Headquarters until 9PM Sept. 12, then drove to Browning.

Sept. 13

Browning, Montana to Butte, Montana

Drove to Great Falls in the rain & the skies looked black ahead of me. Checked the weather forecast in the newspaper and called the weather bureau. Rain & snow expected to follow me through Wyoming into Colorado. I reversed directions & drove to Butte, called Suzanne Goodman for a date & ~~we~~ ^{we} dined at Lydias & spent the evening at the camera club looking at slides of Chile. She was back down from the lookout due to several strikes of

Journal

R.E. Johnson
1967

Sept. 13

Browning to Butte, Montana (cont.)

lightning hitting the Lookout tower & one starting a fire cutting off all her communications to the outside world. She hiked out.

Sept. 14

Butte to Bridger, Montana

Drove south ^{+ east} from Butte through Bozeman and Mammoth Hot Springs (Yellowstone Nat. Park), then east through tower lot & up Lamar Valley & out the ne corner of the park to Cooke City & up on the Beartooth Plateau. The day started clear but by the time I reached the top of the plateau a blizzard was underway. I walked up Clay Butte Lookout (9811 ft.) located southwest of the plateau ~~and~~ and saw many Water Pipits and a few Horned Larks (both species in small flocks of 3 to 8). Timberline is as low as 9000 ft on some parts of the mountains. Clay Butte has a few trees near the tower but otherwise the top is barren except for ~~a~~ good grass cover in rocky soils. Approx. 6 inches of snow covers the top of the peak. Due to impending road closure due to snow I drove down to Reed Lodge (east) & to Bridger & camped beside the road.

Sept. 15

Bridger, Montana to Ferris Mtns, Carbon Co., Wyoming

Drove south to Lander, Wyoming & visited the BLM district office. Lyle Rolston (Assit. District Ranger) ~~told~~ me that the Green (max. elevation 9215) Mtns ^{are} timbered to the top & have no alpine zone. This is confirmed by the overprint (green) on the topo maps for the area (① Caspar, 1962; 1:250,000; ② Sagebrush Flats, 7½ min.). A good dirt road goes to the top of these mtns & traverses the ridge (e-w). The turnoff is unsigned but may be found by driving east from Lander ~~past~~ past Jeffrey City 5 to 6 miles, & turning rt. opposite a mailbox labeled Hoffmeister.

Journal

R.E. Johnson
1967Sept. 15 Bridger, Montana to Ferris Mtns., Carbon Co., Wyoming (cont.)

The Ferris Mtns. are higher (max. elevation 10,037 ft.) and lie east of the Green Mtns. outside the Lander BLM District (in the Rawlins District) but Mr. ^{Lyle} Rolston was fairly certain there was no road approaching the top and that there would be no alpine zone. Limber Pine probably reaches the top.

I drove east through Jeffrey City & found the turnoff to the Green Mtns but decided there was no point in going there since it was obvious by binoculars that the mtns were timbered to the top & were not steep (no diffs). The Ferris Mtns ahead looked more intriguing so I drove on. Turned off (south) the highway (Wyo. 220) at the 2nd road east of Bucklin Reservoirs. This road crosses many fence lines (with gates) before reaching the base of the mountains. This fenced area is flat grazing land with some cattle, many antelope (50± seen) and too many hunters. The road becomes impassable for the VW at a creek crossing (cold) so I hiked the road up creek & eventually to an old mine & collapsed buildings. These are just below the summit ridge of the west division of these mountains. I climbed to the top (9500 ft. approx). Further west was a slightly higher point (9675). This section of mtns have open stands of Limber Pine on most slopes, but there are some barren areas. There is nothing resembling alpine turf. The ridge is solid rock & boulders. A Blue Grouse & a Rock Wren were seen. Slightly lower several Robins were heard. Looking east one could see the tops of the pks of eastern part of the range, which is slightly higher (10,037). They looked identical to the one on which

Journal

R. E. Johnson
1967

Sept. 15 Bridger, Montana to Ferris Mtns., Carbon Co., Wyoming (cont).

I stood, except ^{for} the summit pk itself which had a skeleton forest of white trees on it & therefore looked more barren. Nothing resembling turf was seen & no rosy finch habitat. There are some spectacular ~~etc~~ rock formations with cliffs on their sw face below this highest of ridges but their exposure assures that snow could not remain around them. The se in the distance a snowy (fresh) range could be seen. Earlier I had noted the snow had fallen on the Bighorn & Wind River Mtns. None was seen on the Ferris Mtns, again confirming that the pks here do not attain the alpine climate of the known rosy finch ranges of Wyoming. My interest in the Ferris & Green Mtns. ~~to me~~ was that they lie between the known ranges of the Black & Brown species of Rosy Finch and, geographically speaking, hybrids would most likely occur in these mtns (if it occurs) if they were alpine enough. They aren't & so one can't tell if the 2 species would hybridize. The Laramie Range (much further east) remains as a last possibility. They are ^{slightly} higher but not really in between geographically.

Sept. 16 Ferris Mtns to Snowy Mtns, Wyoming

Clouds and rain cover the Ferris Mtns this morning. Drove south to Rawlins on US 287 & east to Jct with ~~Wyo.~~ Wyo. 130, then south to Saratoga & east to Snowy Range Pass in the Medicine Bow Mtns. Timberline = 10,500 - 11,000 ft. There are many lakes along the extensive flat plateau on

Journal

R.E. Johnson
1967Sept. 16 Ferris Mtns to Snowy Mtns, Wyoming.

either side of the summit ridge (10800 - 12000 ft.). A few of the lakes are below timberline but the majority are higher and surrounded by rocky ground or flat tundra. I hiked from the road near the road summit west to the summit of Medicine Bow Pk (12005), intersecting ~~the~~ a trail to the summit from Lewis Lake Campground at a point 1 mile below the summit. My route crossed Krumholtz and Fell fields. Cushion plants were common (including Carpet Pink). Other plants include a small willow, Arctostaphylos uva ursi, & cinquefoil (pinnate leaf). Conys & Yellow-bellied Marmots were seen in higher rock slides. White-tailed Ptarmigan, Pine Siskins, Water Pipits, & Rosy Finches were seen on the east slope of the summit ridge. The hike was made in a blizzard but 2 Water Pipits & one Ptarmigan were collected. Camped on Mirror Lake.

Sept. 17. Snowy Mtns, Wyoming to Denver, Colorado.

Woke up buried in snow. Reliked to Medicine Bow Pk via same route but was unable to obtain Rosy Finches. Drove to Laramie (noon) and south via US 287 to Loveland, then west on US 34 to Rocky Mtn National Park and "trail ridge road." Collected one Brown-capped Rosy Finch from ^{a flock of 40 on} the open tundra in a blizzard. Returned to Denver.

Sept. 18-20 Denver Colo. to Berkeley, Calif.

Returned to Berkeley via Loveland Pass (blizzard, no Rosy Finches), Colorado Nat. Monument & Arches National Monument.

1 5649-B

